CONFLICTS BETWEEN ALLOPATHIC AND SECTARIAN OBSTETRICIANS IN AMERICA, 1830-1870

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This thesis will discuss the conflicts between allopathic and sectarian obstetricians during the mid-nineteenth century in America. During the nineteenth century, a significant increase occurred in the medical community's involvement in childbirth. Obstetricians with different medical backgrounds began to debate about specific obstetric methods. This thesis provides an opportunity to examine the differences and conflicts between allopathic and sectarian approaches to medicine in the relatively constant setting of childbirth. Childbirth has occurred for thousands of years, so why did such furious conflicts about it arise during the years from 1830 to 1870? Conflicts and animosities extended into the specialty of obstetrics. The allopathic, homeopathic, eclectic, Thomsonian, and hydropathic obstetricians applied concepts unique to their disciplines to their philosophies about patient care. This thesis explores the controversies among obstetricians in America during the mid-nineteenth century and reveals the struggles of each group of physicians to establish and defend a distinct approach to obstetrics.

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Allopathic Medicine

In the early nineteenth century, allopathic medicine represented the dominant medical force in American society. But as the century progressed, many people began to challenge the basic principles of allopathic medicine. A conflict developed between allopathic physicians and sectarian physicians. The allopathic physicians, also known as orthodox or regular physicians, practiced what they regarded as traditional Western medicine.[1] These physicians would eventually give rise to into the American Medical Association.

Allopathic medical theory had its roots in the humoral theory of disease, which was developed by the Hippocratic School.

> This theory maintained that elemental body fluids or 'humors' (blood, phlegm, yellow bile, and black bile) determined health and disease. Health existed when all four humors were in proper proportion within the body; similarly, disease resulted when one of them existed in excess . . . Therapeutic measures were aimed at restoring health by restoring balance . . . Frequently, the 'crisis,' or elimination of the excessive humor, was produced naturally through such processes as hemorrhaging, perspiring, urinating, and purging. When nature's force proved insufficient, the physician intervened, bleeding the patient or administering drugs to act upon the offending humor.[2]

In accordance with this theoretical background, many allopathic physicians used bloodletting and the administration of purgative medicines to treat illness. By the 1830s, some allopathic physicians had begun to question the safety and efficacy of the

traditional treatments, but as Jane Donegan has argued, "the days of heroic medicine had not yet passed completely however, for new ideas and revised therapeutics filtered down slowly to the rank and file of the profession."[3]

The allopathic physicians represented traditional medicine and were the dominant force in American medicine. However, in the early nineteenth century, the allopathic medical community was far from being a unified force. The traditional education for physicians contributed to the fragmented nature of allopathic medicine in the nineteenth century. In the late eighteenth century and early nineteenth century, allopathic medical education usually consisted of an apprenticeship with a practicing doctor. The apprenticeship allowed aspiring physicians to gain clinical experience under the direction of a practicing physician. The apprentice would also learn about medical theory by reading from his preceptor's supply of medical books.[4] Once the apprenticeship was completed, the aspiring physician could practice medicine. Obviously, this form of medical education was highly individualized. The instructions given by one allopathic physician to his apprentice could have differed greatly from the instructions given by another physician to another apprentice. Furthermore, the apprentice relied on the preceptor's library for information about medical theory and one physician's collection of books could certainly vary from another's library. The apprenticeship system contributed to the fragmented nature of allopathic medicine in the early nineteenth century.

The establishment of formal medical schools allowed for a somewhat more standardized form of medical education than the apprenticeship system had offered, but the lack of effective licensing laws during the nineteenth century allowed for curriculums

which could teach a wide range of medical theories. Despite strong allopathic support for the establishment of licensing laws, the few laws that had been enacted at the state level during the early nineteenth century had been repealed by the1840's, due to unusually strong public opposition to the laws.[5] Nevertheless, the creation of the formal medical schools served as a precursor to future licensing regulations, as they provided a means by which the medical profession could be regulated and standardized.

The medical profession had become highly competitive, even within the realm of allopathic medicine. The popularity of newly opened medical schools had begun to produce more physicians, and had effectively flooded the field with practitioners.[6] In addition to the trend of increasing competition within the allopathic medical community, the allopathic physicians would soon confront another problem: sectarian physicians.

By the mid-nineteenth century many medical sects had formed to challenge the allopathic medical system. In addition to having recognized the theoretical differences between the sects and traditional medicine, allopaths recognized that the newly formed medical sects would threaten allopathic reputations and incomes. One allopathic practitioner remarked, "The United States must be regarded as the very elysium of quackery . . . they assume an equality . . . and by fraud and deception, too frequently triumph and grow rich, where wiser and better men scarcely escape starvation."[7] The allopaths, therefore, attempted to discredit the sectarian practitioners, using medical journals, textbooks, and the courts as a forum for debate. They alleged that many sectarian practitioners were uneducated quacks. They further implied that patients would be putting their lives, as well as their money, at risk if they choose to consult with a

sectarian for medical advice. Nevertheless, many people welcomed the formation of the medical sects as they provided alternatives to the harsh allopathic treatments. Indeed, the public sought to protect sectarians from restrictive licensing laws. The sectarians benefited from the repeal of restrictive measures like the early licensing laws. They were allowed to practice medicine without the threat of being charged with practicing without a license, and they were given the same legal rights as licensed physicians. Indeed, the sectarians viewed the repeal of the law as an affirmation of public support for their cause. In his history of eclectic medicine, Robert S. Newton rejoiced in the sectarians' legislative triumphs.

> The history of every state in the Union except three shows that at some period of their history the Allopathic physicians have had laws passed which gave them an entire monopoly in the practice of medicine. They claimed that they alone were prepared to teach and practice the healing art, and that no person except those who fully adopted their own views should be allowed to practice medicine. The first work of the Reformers was to break up this monopoly, and have the Legislatures of the several States to repeal such odious laws and force men to stand or fall upon their own merit . . . In all the varied legal relations they are upon equal standing.[8]

The success of the sectarian efforts to gain legislative protection for their forms of medicine frustrated the allopathic medical community. As one allopath noted

> The public, unfortunately, seems to consider all efforts to limit the practice of medicine to those of scientific attainments, as the attempt of a sect to monopolize rights, and to infringe upon the largest liberty. Under this latitudinarian license, we have Indian doctors, urine doctors, water doctors, steam doctors, and homeopaths, preying upon the community; and each has his representative [in judicial process].[9]

The allopaths recognized that the creation of a licensing system would be impossible, given the public opposition to the prospect. The allopaths would have to compete with physicians from the medical sects. The sectarians organized themselves against the

allopathic competition. The medical sects established schools, wrote textbooks and family guides to health, published medical journals and put their medical theories into practice with significant clienteles.

Homeopathic Medicine

Homeopathy was developed by a German physician, Samuel Hahnemann, and was first introduced in America in 1825.[10] Hahnemann emphasized that homeopathic practitioners should take many symptoms into account when making a diagnosis and treating an illness. Homeopaths alleged that allopaths neglected to take all symptoms into account in order to simplify the diagnostic process.[11] Homeopathy was based on the principle that "like cures like" and that diseases could be treated with small doses of drugs, which would produce similar symptoms in a healthy patient. Although the homeopathic treatments utilized many of the same harsh medicines as the allopaths used, the homeopathic medications were extremely diluted, and these dilutions helped to assure patients of the safety of the treatment. The diluted medicines also served to challenge the allopathic notion that heroic dosing, or the administration of large doses of strong medicines, would produce the best effect.

As one of the most organized sects of medicine in the mid-nineteenth century, Homeopathy posed a significant threat to the allopaths.[12] Homeopaths created schools, published journals and books, and formed medical societies. Moreover, homeopathy was well received among the educated and upper classes of American society. Religious, intellectual, social, and business leaders embraced homeopathy as a viable alternative to

allopathic medicine.[13] Homeopathy also enjoyed support from women, who preferred the milder homeopathic treatments for their children to the harsh, and often, dangerous allopathic treatments.[14] Homeopathic physicians also attempted to reach the poorer classes by offering free dispensaries and clinics.[15] The homeopathic movement reached a wide range of social classes, and the extensive support for homeopathy worried many allopathic physicians.

Although homeopaths asserted that the small doses did not harm the patients, but indeed, cured them, other sectarian practitioners criticized the homeopathic treatments. Another sectarian practitioner responded to the homeopathic claims of success.

> This one fact he has clearly proved, and we challenge the world to refute it, that the patient who takes infinitesimal doses of poison will recover sooner, and be less injured than the patient who takes large doses. Another fact can as easily be proved, that the patient who takes no poison does better than either.[16]

Practitioners from other sects agreed with this statement and disapproved of the homeopathic theories, but nonetheless applauded the homeopathic effort to challenge allopathic medicine.[17]

Homeopathic physicians were determined to reform American medicine, and were prepared to confront the allopathic accusations and allegations. One prominent homeopathic physician, Constantine Hering, wrote, "So great an aim, indeed, cannot be attained without labour, but we are prepared to undertake it; we shall not arrive at it without conflict, but we stand equipt for conflict; we shall not reach it without defamation; but we will suffer ridicule and defamation with composure."[18] Hering's

statement illustrates the homeopathic commitment to providing an alternative to allopathic medicine, despite the attacks that homeopaths would have to endure.

Eclectic Medicine

The eclectic physicians combined various aspects of allopathic and sectarian medicine, claiming the benefits of many systems of medicine, and organized themselves into a distinct sect. The eclectics founded schools, formed medical societies, and published medical journals. By the 1880's, approximately 10,000 eclectic physicians practiced medicine in the United States.[19] Eclectic physicians were hesitant to align themselves with any single medical theory, and as their name suggests, chose to recognize a wide variety of medical treatment options.

The eclectic medical philosophy based many treatments on Thomsonian medicine, a botanical system of medicine formed in the early part of the nineteenth century. Eclectic textbooks often offered homeopathic, hydropathic, and botanic treatment options for a wide variety of illnesses. Eclectic physicians also agreed with many techniques practiced by allopathic physicians, but challenged the use of heroic dosing to cure diseases.[20] One eclectic physician distinguished eclectic medical theory from allopathic theory on six principles:

> What are the reforms by which American Eclectics are distinguished from the old schoolmen? . . .
> 1. We deny the papal infallibility of the profession.
> 2. We deny that it is impossible to produce satisfactory results without the lancet.
> 3. We deny that mercurials are ever necessary.
> 4. We deny the propriety of using any injurious remedies.

> 5. We deny that a physician should be allowed to lose more than 2 per cent [of his patients].
> 6. We deny that we know enough of the materia medica.[21]

Like the homeopaths, the eclectics raised strong arguments against the allopathic use of strong purgatives and bloodletting practices. They also emphasized the need for further developments in medicine, and criticized the allopaths for their attitude of superiority.

Thomsonian Medicine

In 1813, Samuel Thomson devised a system of botanic medicines and obtained a patent for his system.[22] "Thomson attributed disease to an imbalance of the body's humors. With his patented six-step therapeutic regimen of steam and puke, he cleansed and scoured the stomach and bowels, corrected digestion, and restored the body to its proper balance."[23] He sold his medical kits to subscribers for twenty dollars per kit.[24] Thomson encouraged the formation of "Friendly Botanic Societies" to support Thomsonian medicine.[25] Thomsonians operated their own infirmaries, drug stores, and drug wholesale houses, and advocated the boycott of firms that sold allopathic drugs.[26] Thomsonianism appealed to poor and rural families. In contrast to the wealthy and educated clientele of the homeopaths, followers of Thomsonianism were usually poor and uneducated.[27]

The Thomsonians represented one of the strongest movements against the professionalization of medicine. In 1839, Samuel Thomson claimed 3,000,000 followers. If accurate, that figure represented approximately one-sixth of the total American population.[28] By the 1840s, the popularity of Thomsonianism had begun to decline, and

by 1850, the sect had virtually disappeared.[29] Despite its decline in the mid-nineteenth century, the followers of Thomson voiced serious concerns about allopathic medicine. They accused physicians of overcharging for their services, while attacking the treatments used by allopathic physicians. Rather than advocating a reformed system of medicine, like Homeopathy or Eclecticism, the Thomsonians sought to implement a new form of health care, in which families would take an active role. "Every man his own physician" was the battle cry of the Thomsonians, as they published guides to health, with laymen as the intended audience.

With such a large following, Thomsonianism was a clear threat to the incomes of allopathic physicians. Unlike homeopaths and eclectics, Thomsonians did not advocate the formation of medical schools or the reform of existing medical theories. Instead, they challenged the very idea that doctors were necessary to cure disease. This radical stance prompted an extremely harsh response from the allopathic medical community. One allopathic physician called Thomsonianism "the most stupendous system of quackery and the most insulting offering ever tendered to the understanding of a free and enlightened people."[30] Despite allopathic allegations of quackery, Thomsonians managed to reach a significant portion of the American population. The popularity of Thomsonianism clearly demonstrates that many Americans were prepared to abandon allopathic medicine, in favor of safer and cheaper treatments.

Hydropathic Medicine

Another medical sect that acquired a significant following was the hydropathic sect, or the Water-Cure sect, which reached its peak in the years from 1820 through 1860. Like homeopathy, hydropathy was a system of medicine that had been imported from Europe. The Water-Cure was first devised by Vincent Priessnitz, a Silesian peasant, who used water treatments to treat injuries he had sustained in a farm accident.[31] Eventually, Priessnitz developed a complex system of hydropathic treatments, which included a variety of baths, douches, local application of water to affected areas of the body, drinking water, and injections of water.[32] Hydropathists argued that water would cure all forms of illness, and that following hydropathic regimens would promote health. As one of the most prominent hydropathic physicians, Joel Shew, remarked, "the simple agent of pure water, is the best remedy in nature, nor can any possible combination of substances, animal, vegetable, or mineral, each or all, be made which will at all compare with it."[33] This approach to medicine challenged every other form of medical treatment, whether allopathic or sectarian.

Like the Thomsonians, the hydropathists recognized that many followers of hydropathy preferred self-help approaches to medicine. Many of the hydropathic texts offer advice with a lay audience in mind. But in contrast to most Thomsonian practitioners, hydropathic physicians usually converted from allopathic medicine to hydropathic medicine.[34] Consequently, the key players in the hydropathic movement were not laymen, but formally trained physicians who had abandoned allopathic practices for hydropathy. The hydropathic texts reveal that controversy existed over the safety of

allowing patients to prescribe water treatments for themselves, but for the most part, hydropathists recognized the impracticality of discouraging self-treatment and attempted to provide their patients with ample instructions for hydropathic home health care. This concession represented a departure from the allopathic emphasis on the absolute necessity of formally trained medical physicians.

Several of the other medical sects applauded the hydropathists for their efforts to undermine allopathic control, but the other sects did not believe in the cure-all properties of water. A Thomsonian noted, "There is no individual who appreciates the value of cold water, both as the most natural and healthy drink for man and beast, and as a valuable remedial agent, than we do; but we are not prepared to admit that it will accomplish every indication in the cure of disease."[35] On a similar note, Eclectic physicians expressed their concerns over the safety of allowing hydropathic self-treatment. "Hydropathy is frequently a valuable auxiliary in the treatment of disease, yet, when unskillfully and untimely applied, it becomes an additional cause of sickness and death."[36] These sectarian responses to hydropathy reveal that although most practitioners recognized the potential efficacy of water treatments, many were concerned about self-treatments, and many doubted the hydropathic cure-all claims. Nevertheless, hydropathy represented a significant force in the sectarian medicine movement.

The Sectarian Physicians versus the Allopathic Physicians

By the mid-nineteenth century, then, various medical sects threatened the dominant orthodoxy of allopathic medicine. Competing approaches challenged allopathic

medical treatments from several directions, and also represented a source of economic competition to allopathic physicians. Animosity among homeopaths, eclectics, Thomsonians, hydropathists, and allopaths increased during the period from 1830 to 1870. In allopathic medical journals, physicians related horror stories of "irregular" medicine inflicted on innocent patients. In the courts, allopathic physicians testified against sectarian physicians in cases of malpractice. In the legislatures, allopathic physicians advocated licensure laws intended to prohibit the practice of sectarian medicine. In books, sectarian and allopathic practitioners asserted that their own system was the safest and the best form of medicine. Mid-nineteenth century medical journals and textbooks provide a wealth of information about the conflict between allopathic and sectarian medicine, since they served as a public forum for debate among physicians.

The sectarian medicine movement was not merely a nuisance to the dominant allopathic medical community. The public interest in new forms of medicine was a reflection of the dissatisfaction with antiquated allopathic techniques. The various sects raised serious concerns about the safety of allopathic techniques, and encouraged allopaths to modify their treatments to retain their patients. While most of the sects enjoyed relatively brief periods of popularity, the effects of the sectarian movement lasted beyond the lifespan of the individual sects.

The Rise of Obstetrics as a Specialty in America

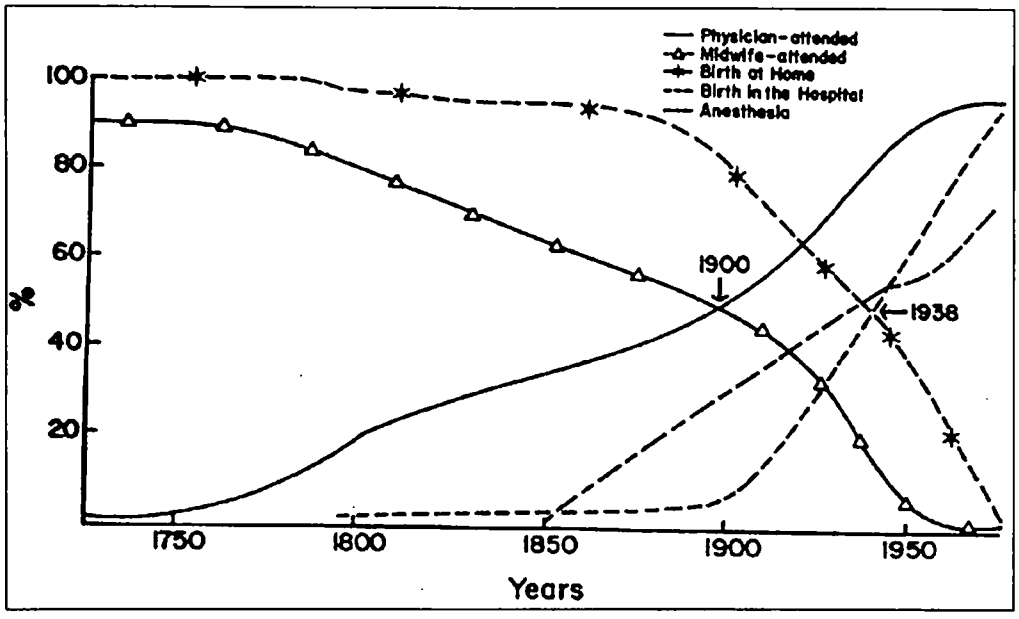


Figure 1: Graph illustrating trends in U.S. childbirth practices, based on estimates. Source: Judith Walzer Leavitt, University of Wisconsin.[37]

Superimposed upon the sectarian uncertainties, another transition was simultaneously occurring: the shift from traditional midwives to medically trained obstetricians. As the graph above illustrates, in the mid-eighteenth century, formally trained physicians attended very few childbirths in America; instead parturient women were typically attended by women and possibly by the parturient woman's husband. By the mid-nineteenth century, physicians attended approximately forty percent of all childbirths in America.[38] Although nearly all nineteenth century births occurred in the home, the transition from traditional midwives to medically trained obstetricians served as a precursor to the twentieth century transition from the home to the hospital. As Judith Leavitt has argued, the increase in physician-attended births between the mid-eighteenth

century and the mid-nineteenth century resulted from rising demand for physician-attended births. And with that demand arose a corresponding interest in obstetrical training for physicians.

By the mid-nineteenth century, obstetrics was a fairly well established specialty of medicine. Schools of medicine hosted lectures on midwifery techniques. Some graduates of medical schools wrote their theses on midwifery or related topics. Practiced accoucheurs, or obstetricians, wrote extensive manuals and textbooks that focused on the diseases of women, care for pregnant women, management of labor, use of obstetrical instruments, and newly developed techniques for managing difficult labors. Medical journals included sections on midwifery that discussed extraordinary cases and newly developed techniques and instruments. The increasing interest in obstetrics and related medical issues in the time period is evident in mid-nineteenth century medical journals and textbooks.

Like any medical field, obstetrics was not immune to internal conflicts or external criticisms. The transition from traditional female midwifery to the initially male-dominated medical specialty of obstetrics was surrounded by controversy. American society debated the morality of "men-midwives." Proponents of traditional female midwifery asserted that the presence of men in the delivery room was inappropriate and immoral. Moreover, it threatened the purity and modesty of women. The medical profession argued that the influence of medical science would render the process of childbirth safer. As Leavitt has effectively demonstrated, many women welcomed the

introduction of medical science to the lying-in room, in the hopes that deaths in childbirth would decrease.[39]

One of the proposed solutions to the gender controversy surrounding the specialty of obstetrics was to train women as physicians. The proponents of women in medicine used a variety of arguments to demonstrate that women deserved a place in the medical profession. Female obstetricians could provide the same level of medical care to women, without raising the concerns over modesty and privacy.

Of course, the various arguments in support of women in medicine were met with staunch opposition from much of the medical community. Even the idea of limiting women's functions as physicians to the field of obstetrics was not accepted by many physicians. It is also important to consider the economic impact of women's entrance into the medical profession. Just as allopathic physicians saw the sectarian practitioners as threats to their economic well-being, they began to view women as potentially threatening as early as the 1850's. For example, in 1853, the editor of the Boston Medical and Surgical Journal wrote

> Female physicians seem to be on the increase among us, and establishing circles of good practice, in spite of the jeers, innuendoes, and ridicule of us lords of creation . . . it is not a matter to be laughed down, as readily as was at first anticipated. The serious inroads made by female physicians in obstetrical business, one of the essential branches of income to a majority of well-established practitioners, makes it natural enough to inquire what course is best to pursue? [40]

This quote reveals that although male allopathic physicians were concerned about the theoretical social implications of women in medicine, they were also considerably

worried about their own incomes. The allopathic physicians were particularly concerned with the impact of female practitioners on the obstetrics specialty. As a consequence of this concern, allopathic physicians devoted a considerable amount of time and effort to discredit female practitioners in their textbooks and medical journals.

In contrast to the allopathic controversy over allowing women to practice medicine, all of the sects allowed women to practice sectarian medicine. By focusing on medical practice within the family, Thomsonianism also allowed women to participate as health care providers without directly challenging the notion of separate spheres.[41] By encouraging women to act as midwives, Thomsonians provided a solution to the male-midwife controversy. Homeopathy and Eclecticism represented an even greater opportunity for women who aspired to be physicians. Many of their schools allowed women to attend classes and earn a medical degree, far before any allopathic medical school adopted a co-educational policy.[42] Both homeopathic and eclectic practitioners were much more accepting of female physicians. These two sects were more concerned with providing adequate medical education for obstetricians than they were about the gender controversies surrounding the obstetrics specialty. Hydropathic physicians addressed the gender controversy by allowing women to train as obstetricians. "While most seem to have favored women attendants, they did not oppose on principle physicians acting as obstetricians."[43] Like some allopathic female physicians, many women elected to practice hydropathic medicine with "the conviction that women's modesty would be best preserved through the use of physicians of their own sex."[44]

All of the sects provided, to varying degrees, the option of a medically trained female obstetrician. Unlike the allopathic practitioners, sectarian physicians did not attempt to prevent women from practicing medicine. Instead, several sects actively encouraged women to train as obstetricians, thus solving the gender issue while still providing medically trained childbirth attendants. In contrast to the allopathic criticisms of female practitioners, sectarian physicians tended to praise female obstetricians and called for more female practitioners. Sectarians also tended to criticize the allopathic physicians for their obvious attempts to maintain control over the obstetrics specialty. While the dominant medical community gradually came to accept women as physicians, the sectarian physicians were ahead of their time in encouraging women to train as obstetricians. The sectarian acceptance of women physicians served to aggravate the tensions between the medical sects and the allopaths.

Allopathic Obstetricians versus Sectarian Obstetricians

With the introduction of many newly developed techniques or instruments, debates raged within the medical field over the efficacy, safety, and morality of the new developments. Medical journals and textbooks served as forums for public debates over new obstetrical developments, such as the administration of anesthesia during labor, the use of forceps, the induction of premature labor, the use of caesarian operations, and the use of craniotomy. Such debates are fascinating to examine, and they also provide the historian with a written record of the internal conflicts within the medical community.

The medical conflict between allopathic and sectarian physicians extended to the specialty of obstetrics. Within articles written by allopaths about obstetrics and related issues, one can find subtle, and not so subtle, criticisms of opposing medical philosophies. Within obstetrics manuals, sectarian physicians defended their own systems of medicine against the allopaths and other sectarians. Allopaths also utilized their own books as opportunities to discredit sectarian practitioners.

The debate over allopathic and sectarian obstetrics did not just focus on the difference in medical philosophies among the physicians. It included specific differences in approaches to the diagnosis of pregnancy, the prenatal care of the parturient woman, the management of natural labor, the management of difficult labor, the use of anesthesia during labor, the use of forceps, the use of craniotomy, the delivery of the placenta, the postpartum care of the parturient woman, and breastfeeding. These different approaches were discussed in detail within mid-nineteenth century periodical articles and obstetrical manuals.

II. ALLOPATHIC AND SECTARIAN APPROACHES TO OBSTETRICS

The Diagnosis of Pregnancy and the Treatment of the Symptoms of Pregnancy

One important area of interest to mid-nineteenth century obstetricians was the diagnosis of pregnancy. From a medical point of view, a diagnosis of pregnancy could rule out other abdominal and digestive afflictions. It could also account for symptoms common to pregnancy, such as cessation of menstruation, nausea, diarrhea, and breast sensitivity. A diagnosis of pregnancy also alerted both the physician and the patient to the need to prepare for a confinement and delivery.

From a legal standpoint, a diagnosis of pregnancy could prevent or delay physical punishment or execution of a female prisoner. Consequently, the lack of a proper diagnosis could result in unintentional injury or death to the fetus. As the fetus had long been considered innocent at law, despite its mother's actions, a punishment of the mother that harmed the fetus would be morally reprehensible.[45] Therefore, a great legal and moral significance was placed on a correct diagnosis of pregnancy.

In addition to the medical and legal implications of pregnancy, obstetricians were well aware of the social implications of pregnancy, as a homeopathic doctor, Henry N. Guernsey, M.D., explained:

> For some to be *enceinte* [pregnant] is the gratification of their highest hopes and most ardent desires; by others it is regarded as a most serious inconvenience - as something to be dreaded on account of health, or in the unmarried, as threatening as a disgraceful exposure of their want of chastity.[46]

Obstetricians had to take these varying interpretations of pregnancy into account when attempting to diagnose a pregnancy. Some women might exaggerate or magnify their

symptoms if they desired a pregnancy, while others might ignore or downplay their symptoms if pregnancy was an unwelcome inconvenience.

Whether one was a sectarian or an allopathic physician, obstetricians encountered these dilemmas on a regular basis. An eclectic obstetrician, John King, M.D., was apt to distrust women's statements of their symptoms on the grounds that they might not desire a pregnancy, and would therefore give intentionally false information.

> We cannot therefore be too cautious in giving full credence to the statements of any female upon this subject, unless we have a sufficient acquaintance with her to justify implicit confidence in her assertions; and we should always depend on our own knowledge of the symptoms, rather than to any light we may elicit from the female.[47]

Most obstetricians included a statement similar to King's in their discussion of the diagnosis of pregnancy. This caution against relying on the female's testimony could be partly attributed to the physicians' concerns about pregnant women seeking abortions. In order to prevent a lack of diagnosis or a misdiagnosis, obstetricians needed to develop a reliable system of diagnosing pregnancy.

Most of the symptoms cited by physicians as indicative of pregnancy did not vary among allopathic, homeopathic, eclectic, Thomsonian, and hydropathic obstetricians. The practitioners agreed that the most common signs of pregnancy included: cessation of menses, nausea, abdominal changes, changes in the breasts (including a darkening of the areola and shooting pains through the breast), sensation of fetal movement (also called quickening), and the presence of a fetal heartbeat. The relative emphasis placed on the reliability of the signs of pregnancy varied.

The ideal role of the patient in the process of diagnosing pregnancy also varied. Some sects emphasized the importance of women's self-awareness, while other obstetricians argued that women's observations should be considered inaccurate. Sectarian and allopathic physicians also disagreed on the reliability of newly developed methods of diagnosis, such as using changes in the urine or using uterine sounds as diagnostic methods.

Allopathic Approaches to the Diagnosis of Pregnancy and the Treatment of Symptoms of Pregnancy

One example of an allopathic physician's approach to diagnosis is found in Dr. Robert Gooch's book. Gooch argued that the presence of the feeling of fetal movement was the most important symptom of pregnancy, as it was the most conclusive, though other obstetricians doubted its significance as it could be confused with other digestive processes. Another prominent obstetrician, Charles D. Meigs, wrote "I may say, with great confidence that the audible and visible movements of the fetus afford the only true and infallible signs of the existence of pregnancy."[48]

Gooch also emphasized the importance of per vaginam examinations in conjunction with abdominal palpitations, as the obstetrician could detect uterine size and location changes, changes in the neck of the uterus and fetal movement. Gooch argued that a per vaginam examination would not confirm suspicions about a pregnancy until well into the second trimester. He recommended that obstetricians "postpone the examination and of course your final decision till the completion of the sixth month."[49]

This delay in providing a diagnosis is significant because it prevented the woman from attaining prenatal care until the third trimester. Many of the sects, hydropathy in particular, placed a greater emphasis on making a diagnosis earlier in the pregnancy, to ensure that women received proper prenatal care.

Gooch highlighted the importance of external characteristics of pregnancy, especially the changes of the breasts. Gooch considered the external changes to be significant indicators of pregnancy, when they occurred with other symptoms. To lend more support to the importance of external exam, Gooch included accounts from several other physicians. These accounts focused on the darkening of the areola as a reliable indication of pregnancy.

Gooch's emphasis on external examination was not uncommon for an allopathic practitioner, but the value of an external exam remained a subject of debate within the realm of allopathic medicine until well into the 1880s. One article published in the Medical and Surgical Reporter in 1883 defended the value of external examination as a diagnostic method. The article mentioned the existence of the linea alba (a dark line that appears on the abdomen during a first pregnancy), and the formation of stretch marks.[50] Although no practitioners argued that external examination should be used alone in the diagnosis of pregnancy, many felt that it could be a significant indicator of pregnancy.

Another important aspect of the allopathic diagnosis of pregnancy was the lack of confidence in a patient's testimony. Many allopathic physicians cautioned obstetricians against listening to their patients. Instead they recommended that physicians rely on their own observations in making a diagnosis of pregnancy. Gooch gave perhaps the most

severe warning in his work. "Do not believe one word they say. Listen to them as you would to a jockey praising his horse. Never rely upon the evidence of their tongues, but on that of their bellies."[51] This approach to obstetrics served to enforce the authority of the doctor, while diminishing the participation of the patient. Many of the sectarian practitioners would challenge this practice by encouraging women to take an active role in prenatal care.

Although some allopathic obstetricians offered milder treatments for nausea during pregnancy, like magnesia or chamomile tea, most of treatments offered by allopathic physicians relied on bleeding techniques. For example, Dr. George Denig recommended the removal of six to twelve ounces of blood to relieve nausea.[52] Gooch also recommended bleeding by leeches or from the arm to treat nausea.[53] In contrast, sectarian physicians staunchly opposed the use of bleeding or strong purgatives during pregnancy.

Homeopathic Approach to the Diagnosis of Pregnancy and the Treatment of Symptoms of Pregnancy

An example of the homeopathic approach to diagnosing pregnancy can be found in Dr. Henry N. Guernsey's book on obstetrics. Like Gooch, Guernsey emphasizes that symptoms of pregnancy were more conclusive when taken together, rather than as separate phenomena. Suspension of the menses was the first symptom given by Guernsey, although he pointed out that the absence of menses was not a conclusive indication of pregnancy. Likewise, the presence of menses was not a contraindication of

pregnancy. Guernsey also included detailed instructions for performing internal per vaginam examinations and simultaneous external abdominal palpations in order to diagnose pregnancy.[54] When his method of diagnosis differed from that of other practitioners, Guernsey asserted the validity of his opinions and explained his reasoning.

Homeopathic obstetricians placed less value on changes in the urine as a diagnostic method than allopathic physicians did. In 1842, an allopathic physician, Elisha Kent Kane, introduced his findings about Kiesteine to the medical community. Kane defined Kiesteine as "a gelatino-albuminous product found in the urine of pregnant females subsequent to the first month of gestation, and which is separated from the other elements of that fluid by rest alone."[55] In his article, Kane discussed the presence of Kiesteine in the urine of pregnant women. He also emphasized that Kiesteine was present where potential or actual lactation existed. Kane argued that although Kiesteine was not a perfect test of pregnancy, it was fairly reliable. The Kiesteine test could also serve to rule out pregnancy. When Kiesteine was not found in the urine of supposedly pregnant women, the probability that the diagnosis of pregnancy was incorrect was 20 to 1.[56] Guernsey argued that the presence of Kiesteine outside of pregnancy made it an unreliable test for pregnancy, although he acknowledged that its presence during pregnancy was a curiosity. Guernsey's opinion represented the homeopathic tendency to rely on the existence of multiple symptoms in the diagnosis of pregnancy, rather than finding a single positive indicator of pregnancy.

Another difference in Guernsey's methods from those of other physicians is in the interpretation of audible signs of pregnancy. Guernsey noted two audible signs of

pregnancy: the fetal heartbeat and the bruit de souffle. He regarded the fetal heartbeat as a definite sign of pregnancy, "since no other condition can produce a similar sound."[57] Guernsey noted, however, that conflict existed over the origin of the sound called the bruit de souffle. Some obstetricians argued that it originated in the placenta, others believed it was produced by the abdomen, while still others, including Guernsey, asserted that it was produced by the uterus. Guernsey argued that the sound could be called a uterine murmur, and while it was not a conclusive proof of pregnancy, it could be taken into account with other symptoms consistent with pregnancy.

The homeopathic approach to the diagnosis of pregnancy, as represented by Guernsey, focuses on the inclusion of many symptoms and not on identifying a single indicator of pregnancy. Guernsey's frank confrontation of varying approaches to diagnosis demonstrates his understanding of the conflicts among sectarian and allopathic medical practitioners. Furthermore, Guernsey warned against making an immediate diagnosis or denial of pregnancy, as he fully understood the potential implications of a misdiagnosis or lack of diagnosis of pregnancy.

Homeopathic physicians provided their patients with a variety of different treatment options for severe symptoms of pregnancy. In his work, Homeopathic Domestic Physician, Dr. J.H. Pulte recommended a wide variety of treatment options for troubling symptoms of pregnancy. The combinations of prescribed medicines would vary depending on the specific symptoms presented by the patient.[58] Dr. C. Croserio also provided an extensive list of medical treatments for symptoms of pregnancy in his book, Homeopathic Manual of Obstetrics.[59] In both Croserio and Pulte's works, the

recommended doses of medicine were extremely diluted, in accordance with Homeopathic theory. The significant dilutions of the medicines more than likely produced fewer negative side effects than the severe treatments prescribed by allopathic physicians and physicians of other medical sects. The flexibility of prescriptions depending on the collection of symptoms presented by the patient is representative of the homeopathic commitment to treating every symptom. The homeopathic system of obstetrics offered expectant mothers a safer alternative to the allopathic techniques of bleeding and purging.

Another important aspect of the homeopathic prenatal treatment is the emphasis placed on diet and exercise. While many allopathic physicians advocated bed rest and a meager diet of gruel and tea, Dr. Pulte recommended exercise and a diet composed of strengthening food.[60] Homeopathy allowed for greater freedom in movement and diet, and discouraged a sedentary lifestyle, which could have been potentially harmful to a pregnant woman and her unborn child.

Eclectic Approaches to the Diagnosis of Pregnancy and the Treatment of Symptoms of Pregnancy

Dr. Wooster Beach, one of the most prominent eclectic physicians of his day, emphasized the significance of a correct diagnosis of pregnancy in his work, An Improved System of Midwifery, Adapted to the Reformed Practice of Medicine.

> It is very important that the accoucheur should be able to distinguish these changes from others which resemble them, and to determine whether the female be pregnant or not; because her reputation, as well as the moral reputation of the female, will frequently depend

on a correct or incorrect diagnosis of a supposed case of pregnancy.[61]

This assertion reveals that Beach, like Guernsey, recognized the potential social implications of a misdiagnosed case of pregnancy. Beach and Dr. John King, another eclectic physician, both emphasized that a physician should rely on his own observations and knowledge, and ignore the comments and opinions of his patient, in order to make a reliable diagnosis.[62]

Another example of the eclectic approach to diagnosing pregnancy can be found in King's book. In addition to the usual signs of pregnancy, King looked for the following symptoms in confirming a diagnosis of pregnancy: a change in the color of the vulva, a change in the color of the skin (pregnancy mask), pica (craving of inedible substances, such as dirt or paint), heartburn, headache, toothache, fainting spells, quickening (which he describes as the feeling of fetal movement, and not the ascension of the uterus into the abdominal cavity), and the presence of Kiesteine in the urine. King also included even more detailed instructions for performing per vaginam examinations, abdominal palpations, and ballottement. Like Guernsey, King emphasized that an obstetrician should take the entire range of symptoms into account when attempting to diagnose pregnancy.

King tended to focus on the external symptoms of pregnancy, such as a change in the color of the vulva (from a pink to a bluish tint), a change in the color of the skin (or the appearance of freckles on the face, neck, and breast), and changes in the breast (especially the darkening of the areola). King, like many allopathic practitioners, placed a higher value on external examination to diagnose pregnancy than did homeopathic

obstetricians. Although King included external symptoms as significant indicators of pregnancy, he emphasized that taken alone, the symptoms were not reliable positive signs of pregnancy.

In contrast to Guernsey's lack of confidence in the use of changes in the urine as a diagnostic tool, Beach asserted that changes in the urine should be taken into account. He stated that in pregnant women urine was more abundant and was also pale and limpid.[63] The use of urine as a diagnostic tool is an example of the acceptance of an allopathic diagnostic method.

Dr. John Buchanan, another eclectic physician, noted in this work that changes in the urine could serve as a significant diagnostic tool.

> Peculiar alterations in the urine are often noticeable in pregnant women, and although some have thought that pregnancy can be detected by a microscopical and chemical examination of the urine alone, For my own part I cannot coincide with those who maintain that position, although I attach considerable importance to these signs.[64]

Although Buchanan cautioned against the use of any single method of diagnosing pregnancy, he acknowledged that the observation of changes in the urine, when considered with other symptoms, could contribute to a reliable diagnosis of pregnancy.

Despite the acknowledged significance of changes in the urine, Beach emphasized that only two infallible signs of pregnancy existed: the movement of the child and the fetal heartbeat. Beach recommended that all obstetricians examine the woman to ascertain fetal movement. "The motions of the child will infallibly, if alive, declare its existence."[65] Although Beach encouraged obstetricians to take all symptoms into account

when making a diagnosis, he pressed the point that without hearing a fetal heartbeat or feeling fetal movement, the diagnosis could not be confirmed.

Eclectic obstetricians provided many options for treating troublesome symptoms associated with pregnancy.[66] King's inclusion of treatments for symptoms of pregnancy is evidence of the eclectic concern for symptomatic treatment, and not necessarily treating the entire range of symptoms. King's inclusion of multiple treatment options is also evidence that the eclectic obstetricians had developed a rather sophisticated system of medicine. The treatment options reflect that eclectic practitioners drew from a wide range of medical theories. For example, a leading hydropathic physician, Dr. Joel Shew, noted that Beach often used hydropathic treatments to relieve illness. He quoted Beach as having said "It has sometimes appeared to me that I could fulfill almost every indication by the use of water. . . But we must not simplify too much."[67] Beach's comment is representative of the eclectic commitment to accept efficacious treatments from any branch of medical theory, but not to adhere to any specific theory.

Thomsonian Approaches to the Diagnosis of Pregnancy and the Treatment of Symptoms of Pregnancy

As a medical sect that promoted the idea, "Every man his own physician," the Thomsonian approach to the diagnosis of pregnancy differs considerably from the approaches of homeopathic, eclectic, and allopathic practitioners. Most of the Thomsonian texts were written for an audience of laymen. They were not intended to serve merely as textbooks for aspiring physicians, but also as guides to health for the

average family. Consequently, the Thomsonian sources sought to educate women about how to diagnose pregnancy for themselves, as well as to teach Thomsonian obstetricians about the diagnosis of pregnancy. As Dr. Horton Howard expressed,

> We are fully satisfied that the more knowledge females possess of themselves, and of their complaints, and particularly of the principles of true medical science, the less will they be under the influence of that painful solicitude and anxiety to which their peculiar situation, and diseases consequent thereon, subject them.[68]

Due to the Thomsonian emphasis on exposing female patients to information about their bodies and their conditions, there existed no emphasis on ignoring the comments of the female patient. In fact, the Thomsonian physician valued the input of his patient. Thomas Hersey, a Thomsonian practitioner, encouraged other physicians that

> by a little experience and careful observation, having a few intelligent patients to deal with, a faculty of discrimination, not only by touch, but by all the concomitant circumstances, [a diagnosis of pregnancy] may be obtained, that cannot be acquired in any way.[69]

This statement reveals the Thomsonian reliance on a patient's intelligence in making a correct diagnosis.

Hersey's list of the symptoms of pregnancy included the common signs of pregnancy, but also added irritability and changes in the color of the eyelids to his list of symptoms.[70] Like the eclectic physicians, Hersey relied a great deal on external examinations in making a diagnosis. He did, however, emphasize that all symptoms should be considered before declaring a diagnosis.

As both Hersey and Howard's works on obstetrics were written in 1836, six years before Kane's publication of his findings on urine in pregnant women, neither author

commented on the reliability of urine as a diagnostic method. Hersey did warn against the use of blood as a diagnostic tool.

> The sizy, yellowish, blueish, oily appearance of blood, drawn from a recently impregnated woman, when suffered to stand a short time, undisturbed, is one of those signs of pregnancy, to which Thomsonians will not have recourse for information, unless they violate the instructions of the great founder. . . and prove themselves unworthy the confidence of the great fraternity with which they profess to be united.[71]

Hersey's harsh warning demonstrates that Thomsonian physicians were limited to those practices that did not violate Thomsonian views, such as the perceived negative effects of allopathic bleeding practices.

On a similar note, Thomsonian practitioners did not recommend the use of bleeding as a treatment of the symptoms of pregnancy. They did, however, advocate the use of many different botanical treatments. Howard offered the names of several patented powders for the relief of symptoms associated with pregnancy.[72] He also noted that "sickness is aggravated by the longing for some particular food; which, if possible, ought always to be gratified."[73] Like Howard, Hersey recommended the use of Thomsonians remedies in pregnancy. Hersey advocated the use of a full course of medicines every five to eight days and the use of "Dr. Logan's long course" between medical treatments.[74] Although Hersey advocated the use of medical treatments, he cautioned against the use of strong purgatives, like those used by allopathic physicians.

> We frequently meet with persons who will insist on purgative medicines. They are more seldom necessary that many can be persuaded to believe. Drastic purgatives we never use. Such as are gently laxative, are occasionally useful.[75]

The Thomsonian rejection of strong purgatives was a challenge to allopathic treatment, but the extensive use of botanic medicine and patented remedies was a departure from the occasional use suggested by homeopathic and eclectic practitioners.

Hydropathic Approaches to the Diagnosis of Pregnancy and the Treatment of Symptoms of Pregnancy

The hydropathic approach to the diagnosis of pregnancy and subsequent prenatal care was similar to the Thomsonian approach in that it encouraged women to take responsibility for their own health care.[76] Dr. Joel Shew, one of the leading hydropathic physicians in the mid-nineteenth century, cited many of the same symptoms of pregnancy as did the previously mentioned authors.[77] While Shew's work was published well after Kane's work on Kiestiene, his writing contained no mention of the reliability of urine as a diagnostic method. Instead, Shew emphasized symptoms that women could use in diagnosing their own pregnancies.

Hydropathic physicians emphasized the importance of a correct diagnosis of pregnancy because they considered prenatal care to be crucial to a healthy pregnancy and childbirth. In cases of nausea, Shew recommended "a spare diet; invigorating exercise; constant employment; the wet-girdle; and daily bathing."[78] In this respect, the hydropathic treatment of the symptoms of pregnancy is similar to the treatment advocated by the homeopathic and eclectic physicians. All three sects criticized an indulgent, sedentary lifestyle. Like the other sectarian practitioners, hydropathists rejected the severe treatments used by allopathic physicians. "Blisters, emetics, purgatives, opiates, and bleeding - all these should be most sedulously avoided by the pregnant," asserted

Shew.[79] The hydropathists alleged that "allopathic physicians paid no attention to prenatal care, wrongly permitting women to be 'pampered and indulged' and then further weakening them with venesection [that is, bleeding] and medication."[80]

In contrast to the allopathic physicians, homeopathists, eclectics, and Thomsonians, hydropathists rejected the use of any medicinal treatment during pregnancy and childbirth. Jane Donegan argued that "to hydropathists, pregnancy and childbirth did not constitute disease states requiring medical assistance as a matter of course. Rather childbirth was seen as a natural process over which women, by properly preparing themselves, could exercise considerable influence."[81] Therefore, the hydropathic obstetricians considered prenatal care to be as important as the care a woman received during labor. They recommended daily exercise, a bathing regimen (usually taken two to three times daily), careful monitoring of the bowels, adequate rest (in the form of daily naps), and strict attention to diet.[82] A female hydropathic obstetrician, Dr. Mary Gove Nichols, provided the following guidelines for hydropathic prenatal care:

> Daily wet sheet packing, which is a powerful tonic to the nerves. . . the plunge bath, and sometimes the dripping sheet after the pack, the sitz bath once or twice a day, cold water enemas to keep the bowels open, if inclined to costiveness, and vaginal injections of cold water.[83]

Gove Nichols asserted that by using this prenatal regimen, the women under her care had labors of four and a half hours or less. She also argued that women who had endured long, protracted labors in the past had significantly shortened their time spent in future labors by using a hydropathic regimen.[84] Gove Nichols's regimen demonstrates the hydropathists' adherence to the principle that water treatments were the best way to promote health and ensure a safe childbirth. The hydropathic approach to the diagnosis of

pregnancy and subsequent prenatal care illustrates a clear rejection of the allopathic practices and a new emphasis on preventative health care, in which the patient took an active role.

Significant Differences Between the Approaches to the Diagnosis of Pregnancy and the Treatment of the Symptoms of Pregnancy

Although most of the symptoms listed by the different obstetricians were the same, each physician placed a different level of significance on the various symptoms. The allopaths emphasized the importance of external characteristics of pregnancy and advocated the use of external examinations in the diagnostic process. They also expressed the most interest in the development of the Kiestiene method of diagnosis. The homeopathic obstetrician tended to emphasize the inclusion of all symptoms, in accordance with the homeopathic interest in the analysis and treatment of every symptom presented by a patient. The homeopathists were less interested in the Kiestiene method, and considered it to be unreliable. Indeed, the development of a single test for pregnancy would not address the homeopathic need for the inclusion of all symptoms. The eclectic physician focused on the external symptoms of pregnancy more than the physicians from other sects did. Several eclectic practitioners noted that changes in the urine could serve as a reliable diagnostic tool, when taken into account with other symptoms. The eclectics' interest in the Kiestiene method represents a reserved acceptance of allopathic method. The Thomsonians wrote for an audience of laymen, and therefore emphasized the need for women to diagnose their own pregnancies. They included symptoms that women

would be able to take into account in confirming a suspected pregnancy. The hydropathists also emphasized those symptoms that women could use to diagnose pregnancy.

Women's proper role in the diagnosis of pregnancy varied in the different approaches. The allopathic, homeopathic, and eclectic practitioners expressed a distrust of women's testimonies and encouraged physicians to rely on their own observations, rather than on a woman's claims. These reservations about women's honesty were probably rooted in the realization that pregnancy carried many social consequences for women, and that some women did seek out abortions. In contrast, the Thomsonians and hydropathists not only trusted women's descriptions of their symptoms, they also encouraged women to take a more active role in diagnosing pregnancy and beginning a prenatal care regimen.

The different medical philosophies also prompted each group to develop different approaches to prenatal care and the treatment of the symptoms of pregnancy. The allopathic physicians frequently used the most severe treatments, relying on bloodletting and purgatives, and did not criticize sedentary lifestyles. The sectarian practitioners developed different prenatal treatments in response to the harsh allopathic treatments. All of the sectarian practitioners recommended exercise and attention to diet, therefore rejecting the fashionable sedentary lifestyle. Homeopathists used extremely diluted medications, prepared according to the homeopathic theory. They also advocated the use of medicine only for very severely troubling symptoms. The eclectics allowed for the use of a wide variety of medicines, thus reflecting the eclectic embrace of many different

medical theories. They criticized the allopathic treatments as being unsafe. Thomsonians recommended the use of patented powders and botanic remedies for the symptoms of pregnancy., and criticized the allopathic use of strong purgatives. Hydropathists emphasized the importance of prenatal care and health throughout pregnancy. They offered a full water-cure regimen to be followed during pregnancy and claimed that the treatment resulted din shorter and less tedious labors.

The Management of Natural Labor

A natural labor is one that is "accomplished by the unaided powers of nature."[85] Most obstetric texts divide the process of labor into three stages. The first stage of labor consists of contractions of a "cutting or grinding character," shivering, the discharge of mucus from the cervix, and the gradual dilation of the os uteri (the entrance from the cervix to the vagina). The second stage of labor is composed of a different character of pains, which are longer and more frequent, the discharge of the liquor amnii, the need to bear down, and finally the birth of the child. The third stage of labor is the delivery of the placenta.[86]

The various approaches to the management of labor demonstrate that allopaths, homeopathists, eclectics, Thomsonians, and hydropathists employed unique methods. The groups of practitioners also held varying views about the woman's role in the delivery room.

Allopathic Approaches to Natural Labor

All physicians, regardless of their theoretical affiliations, acknowledged that labor was a natural process. But the allopathic physicians cultivated the notion that the presence of a trained obstetrician was absolutely necessary in any successful childbirth. One skeptical allopathic obstetrician wrote, "Thanks and blessings have been poured forth, under the idea that he had saved their lives in labor, when the accoucheur had merely looked on and admired the perfectly adequate powers of nature."[87] While this particular allopath was somewhat critical of obstetricians who presented themselves in such a light, his words reveal that many patients considered the presence of the obstetrician to be crucial. Very few allopaths contradicted this notion. Sectarian practitioners alleged that allopathic physicians even resorted to unnecessary administration of medication and use of instruments to support the idea that a birth attended by a medical professional would be faster and safer, despite potentially dangerous side effects.

One of the most striking differences between the sectarian approaches and the allopathic approach to natural labor was the attitude towards the parturient woman. Dr. William P. DeWees, a well-known allopathic obstetrician, devoted a section of one of his books to the proper behavior of the woman during labor. DeWees cautioned against the woman attempting to rush the delivery during the first stage of labor by taking food or drink or by walking.[88] But most sectarian obstetricians allowed women to lie, sit, stand, or walk during the first stage, according to how she felt.

Furthermore, DeWees was even more concerned with asserting the authority of the obstetrician over that of any nurses present and also over the parturient woman herself. DeWees stated "let her yield entirely to his directions, for she cannot fail to know less than her physician; therefore she is not entitled to be her own directress. . . she must have no opinions of her own, as regards her physical and medical treatment: submission is her duty."[89] In addition to this opposition to the woman's participation in her own health care, DeWees was clearly suspicious of attending nurses. He stated several times that women should ignore any statement by her nurse, should it contradict the instructions of the physician.

The writings of several allopathic practitioners reflected a concern for modesty. These practitioners noted that although women conceded to the idea that a medically trained obstetrician would increase the chances of a successful birth, the presence of a male attendant in the delivery room could raise issues about propriety and modesty. Gooch even noted, "I never stay in the room when I can with propriety stay out of it."[90] Although Gooch's comment is somewhat extreme, several other allopathic obstetricians acknowledged the same underlying concerns.

DeWees's overall discussion of breastfeeding leaves the impression that immediate application to the breast produced the best effect for the child and the mother. DeWees recommended placing the child at the breast as soon as the woman was no longer fatigued. Other allopathic physicians recommended immediate breastfeeding in order to induce contractions sufficient to detach the placenta.[91]

During the third stage of delivery, allopathic physicians were more likely to use obstetric methods to deliver the placenta. Unlike many sectarian obstetricians, allopaths only waited an average of one and a half hours before utilizing obstetric methods of placenta removal.[92] In cases of retained placenta many allopathic obstetricians resorted to the insertion of the hand into the uterus to manually detach the placenta. Homeopathic opposition to the use of mechanical methods of removing the placenta also suggests that some practitioners utilized instruments to detach the placenta. Another method introduced by an allopathic physician included "the application of a broad bandage round the abdomen, and firm pressure made with both hands on the fundus uteri." This same physician recommended that if this method was not effective, that breastfeeding should induce contractions sufficient to cause detachment.[93] Numerous articles in the American Journal of Medical Sciences illustrate the allopathic interest in the development of new methods of detaching a retained placenta. In one article, an allopathic physician introduced a method of placenta removal that involved an injection of warm water and spirits into the umbilical cord. The physician noted three successful cases in which this method was employed.[94] Allopathic physicians emphasized that the obstetrician should never leave his patient without having first delivered the placenta.

Homeopathic Approaches to Natural Labor

Guernsey's book provides a detailed description of the stages of labor, the various presentations of the child at birth, and the effect of labor on the mother. Guernsey presents the homeopathic view of the proper care of a parturient woman.

> When this grand function commenced, the pregnant woman comes into a new physiological state, and if harmony exists throughout her entire organism, her labor will be comparatively free from suffering, and parturition will be accomplished as speedily as is consistent with safety. If a *want of harmony* should exist, *symptoms* will be developed and manifested in some way, by means of which the follower of Hahnemann will be guided to make that selection from the great storehouse of the Materia Medica which shall at once relieve and remove the disarray and re-establish harmonious action.[95]

During a natural labor, homeopathic obstetricians avoided intervention in the labor process unless it became necessary. In the first stage of labor, homeopathic obstetricians allowed their patients to walk, sit, or lie down, depending on what they found comfortable.

The role of the homeopathic obstetrician during the first stage of labor was to watch and wait, provided that the practitioner had determined that the position and presentation of the child were natural. In a natural labor, only the physician and a nurse should have been present, and the physician should have been absent as much as possible until the end of the labor. If a labor seemed delayed by a lack of discharge of the waters, the obstetrician could rupture the membranes.

During the second stage of labor, the woman was not permitted to leave the room to urinate or defecate. Guernsey argued that "it is far easier to remove such discharges from the bed than to extricate a new-born child from the chamber."[96] An enema could be used to free obstructions from the rectum. A catheter could be used if the woman could not void excess urine. During the delivery of the placenta, the homeopathic approach dictated that the position of the placenta be determined before taking any actions. If the placenta had been expelled from the vulva, it may be removed. If the placenta was lying

in the vagina, the obstetrician considered it as being detached, and could extract it from the vagina. If the placenta was still attached, detachment was to be manually encouraged by gently applying external pressure on the uterus. The homeopathic approach to the detachment of the placenta differed considerably from other approaches. Guernsey was quite clear on his approach to detachment of the placenta:

> Should the placenta remain attached to the uterus, the question arises, Should any mechanical measures be resorted to to secure its detachment? According to my personal experience, I should say quite decidedly, No! The placenta may remain attached for hours without doing any actual harm to the woman.[97]

This approach is different from the allopathic approach because it allows for a longer period of time before obstetric methods are introduced. If the placenta had not detached after a significant amount of time, the hand could be inserted into the uterus to break up adhesions of the placenta.

After the birth, Guernsey recommended that a soft cloth should be applied to the vulva, after she is dried off. Guernsey wrote an entire page on the practice of not applying a bandage to the abdomen. In this respect, the homeopathic approach to postpartum care differed from other approaches. Guernsey argued that the use of a bandage did not accomplish the goals the obstetricians was trying to accomplish by using it, and that it could actually cause harm to the patient. Instead of using the bandage to attempt to aid the contraction of the abdomen, Guernsey recommended allowing nature to contract the abdomen and allowing free blood flow to the abdomen.[98]

Guernsey strongly discouraged any conversation with the patient and recommended a darkened quiet room for the patient's recovery from labor. The nurse was

responsible for keeping the patient comfortable and clean, while the obstetrician should remain for at least half an hour to observe the patient. Guernsey's reliance on a nurse, and his confidence in her abilities was a sharp departure from DeWees's attitude of distrust.

Unless extreme soreness or bruising occurred, Guernsey discouraged any postpartum use of medicine. The homeopathic approach, in its rejection of the application of the bandage and discouragement of use of postpartum medication differentiated it from the other approaches. These rejections also demonstrate the homeopathic commitment to the least intervention possible during natural childbirths.

The homeopathic approach to postpartum care is also different from the other approaches in that it did not allow for immediate breastfeeding of the child, due to the assumed exhaustion of the mother. Instead the mother should be counseled on breastfeeding during the obstetrician's second visit, which should take place twelve to twenty four hours after birth.[99]

Eclectic Approaches to Natural Labor

King's eclectic book gives much more discussion of the mother's behavior during labor than did the homeopathic or allopathic works. For example, in his description of the first stage of labor, King described the effect of the painful contractions on the woman, noting that the pains "usually cause much suffering, obliging the patient to suspend for the time whatever occupation she may be engaged in, and forcing from her moans, or a short and fretful cry."[100] According to King, the woman could also become irritable and say unpleasant things to the physician. King, like Guernsey, emphasized the need for a

per vaginam examination in order to discover the presentation of the baby. King gave much attention to potential problems related to female modesty in his book and suggested using a third party (preferably female) to obtain permission to perform a vaginal examination. King's determination of the stage of labor depended largely on the behavior of the woman. After the examination was complete, preparations were to be made for delivery. The obstetrician could leave the home of the patient for no more than one hour at a time. During the absence of the practitioner, the care of the woman was left to the nurse or midwife.[101] In the case of back pain, the nurse can apply pressure to the back. King is quick to note that the obstetrician should not exhaust himself by performing these methods of pain relief.[102] Like homeopaths, eclectics relied on the capabilities of the nurse during labor, and were far less concerned than was DeWees with power dynamics in the delivery room. In fact, eclectics emphasized that "above all things, the nurse should have the entire confidence of the physician in attendance, and vice versa, without this there is danger."[103]

In the second stage of labor, King recommended that the woman lie on her back, but mentioned that it if the woman obstinately preferred another position that it was better not to argue with her. During the second stage, King noted a marked difference in the sounds made by the woman. "The tone is not of the fretful, moaning character of the first stage, but is of a straining character, sometimes terminating in a short cry and gasping for breath, and affords a good test for the practitioner to determine the second stage from the first."[104] Some eclectic practitioners encouraged women to move during the second stage of labor, noting "I have often been agreeably surprised at the sudden and happy effect of

this change of posture."[105] In contrast to Guernsey's opinion, the eclectic obstetrician recommended the immediate placement of the child at the breast.

In the delivery of the placenta, the eclectic obstetrician was more likely than the homeopathic physician to attempt to detach the placenta. King stated that if the placenta has not detached within an hour after birth, that the obstetrician must employ a method of detachment.[106] Another eclectic physician recommended the use of ergot, the external application of pressure on the uterus, and the alternate application of heat and cold.[107] This approach is an acceptance, rather than a departure from the manual medical methods advocated by allopaths. King listed several methods of detaching a retained placenta, including the application of cold water to the abdomen and the use of ergot to induce contractions. Only after these methods failed, did King recommend the manual extraction of the placenta. One important difference between the homeopathic and eclectic approaches to the delivery of the placenta is that the eclectic practitioner allowed for the use of mechanical means of detaching the placenta. King suggested the use of placental forceps to remove the placenta, when necessary.

In contrast to Guernsey, a majority of eclectic obstetricians recommended the use of an abdominal bandage to facilitate the contraction of the uterus. King was quite adamant that the bandage should be applied by a female, for the sake of modesty. Eclectic physicians allowed for the use of opiates to calm the woman after the birth. This acceptance of postpartum medication contrasts with the homeopathic assertion that medication should occur only in rare cases. Like Guernsey, King and Buchanan advised obstetricians to remain with the patient for at least one hour after birth.

Thomsonian Approaches to the Management of Natural Labor

The Thomsonian approach to natural labor presented the greatest challenge to the allopathic approach. Thomsonians firmly rejected any interference on the part of the midwife with the natural labor process. They emphasized that although parturient women should be attended by someone who would perform necessary duties, that the presence of a medically trained obstetrician was unnecessary.

> The idea has some how obtained, and the evil has spread extensively, that the best practitioners are they who possess some peculiar art in restraining and regulating false pains, and promoting, by some wonder working medicine, such as genuine. Hence many have valued themselves for their great skill in controlling the powers of nature, and incalculable have been the mischievous effects of such ignorant and wanton pretensions.[108]

Thomsonians accused professional obstetricians of interfering with the natural birth process by performing unnecessary obstetrical operations, like administering contraction-inducing medications to speed up births. They alleged that many obstetricians were more concerned about their own reputation than their patients' well-being.[109] Thomsonians also attacked the medical profession by noting that families could save money and prevent unnecessary procedures by relying on Thomsonian midwives.[110]

The Thomsonian texts provided instructions for laymen on how to safely attend and manage childbirths. They asserted that the actual number of unnatural births was so low that it would be safer for women to avoid meddlesome obstetricians altogether, in favor of an approach to obstetrics that allowed for no intervention.

> We believe that ninety-nine cases in a hundred will terminate without any aid from art whatever; leaving but one case in a hundred requiring assistance. Of this number, probably nine-tenths could be delivered by ordinary female midwives; the other tenth –

suppose they die, the mortality would be far less than it is now.[111]

This argument reveals that Thomsonians were very concerned about deaths related to obstetric intervention. Howard summarized the Thomsonian philosophy toward obstetrical intervention during labor when he stated, "Meddling with women in labor always does more hurt than good."[112]

A fascinating aspect of the Thomsonian management of childbirth is its attitude towards medication during childbirth. Although Thomsonians criticized allopaths and other sectarians for interfering with the natural process, they allowed for the use of botanical medicines to regulate labor. The Thomsonians advocated the use of teas to encourage perspiration and warmth, in accordance with Thomsonian theory about the connection between health and a balance of warmth in the body. Thomsonians also recommended the use of rattle-root tea to regulate contractions. They also suggested steaming and bathing to relax the external parts of the mother during labor.[113] One Thomsonian author strongly advocated the use of red raspberry tea and cayenne. He claimed, "If the pains are premature, it will remove them; or if timely and feeble, it will stimulate the womb to more vigorous contractions and facilitate the labor."[114] The Thomsonian use of medicine during labor seemed to contradict their philosophy of not interfering with the natural labor process.

In contrast to allopaths, Thomsonians allowed for free movement during labor. Most Thomsonians wrote that a woman should be allowed to choose any comfortable position, if she should become restless or dissatisfied.[115] Hersey also noted, "If any arrangement appears necessary, contrary to her inclinations, such arrangement should be

suggested and made with tenderness and caution."[116] This approach differs considerably from DeWees's policy of allowing no movement.

In the delivery of the placenta, Thomsonians were far less likely to resort to manual, mechanical or medical means of extraction. Unlike most practitioners, some Thomsonians considered the third stage of labor to be of minimal importance. Although Hersey discussed the dangers of delaying the removal of the placenta, Howard argued that the placenta could remain safely attached for several days without danger to the mother.[117] In cases of retained placenta, Hersey suggested changing the position of the mother or gently pulling on the umbilical cord while applying external pressure to the abdomen. He emphasized that no "violent efforts" should be used to remove an attached placenta.[118] In contrast, Howard actually omitted from his book any instructions on removing a placenta.

> The artificial extraction of the after-birth seems so much at variance with the fundamental principle of trusting to nature, which we have so strongly and so often enforced, that we feel almost disposed now, in offering the second edition, to erase the directions for its performance from our pages.[119]

Evidence suggests that Howard's approach was very common among Thomsonians, as several practitioners were accused of malpractice and sued for allowing a retained placenta to remain in the uterus.[120]

Thomsonians advocated the application of an abdominal bandage after the birth, in contrast to the homeopaths. They also advocated the use of patented treatments for postpartum care. For example, Hersey noted that applying "Jewett's stimulating liniment" on the abdomen, back and loins promoted healing.[121] This comment reveals the Thomsonian connection with patented medicine.

Hydropathic Approach to the Management of Natural Labor

Hydropathists employed many of the same treatments in childbirth as they advocated for prenatal care. They accused allopaths of meddlesome midwifery and preferred to rely on the soothing effects of water in childbirth.[122] Hydropathists did not profess to remove pain from childbirth, as Shew argued, "Pain is a natural condition in childbirth. It is not true, as some assert, that the process can be rendered a painless one."[123] Hydropathists emphasized the maintenance of health, in order to ensure a successful delivery. They claimed that if one practiced hydropathic regimens, "the period of labor was wonderfully abridged, the power of enduring pain wonderfully enhanced, and the hour of trial so greatly shortened as to allow rapid and almost immediate recovery postpartum."[124]

Hydropathists stressed that most labors were normal, and acknowledged that many women would not be attended by a hydropathic physician, due to the small number of physicians. Therefore, they provided instructions for women on the ideal hydropathic regimens to use during childbirth.[125] They emphasized that labors should progress naturally and avoided meddlesome midwifery. One account of a hydropathic perspective of childbirth can be found in The Cormany Diaries: A Northern Family in the Civil War. The parturient woman's husband, Samuel Cormany, was a follower of hydropathy and in his diary he expressed his concerns with the midwife's techniques.

> Too vigorous an effort was made by the Lady to have Pet – "Press" – "Pull on the towels fast to the bed-posts" "Beardown" - &c. I remonstrated that there was too much hurrying of nature – take time – I urged – give nature a chance – so I prevailed.[126]

This account of the hydropathic influence on childbirth illustrates the importance of the hydropathic emphasis on self-doctoring. Although the midwife was not a hydropath, the patient's husband was able to convince the midwife to avoid the meddlesome midwifery that hydropathic obstetricians had denounced.

The hydropathic regimen in childbirth included various baths, enemas, and vaginal injections. One woman who was attended by female hydropathists wrote,

> At the commencement of labor, I took a sitz bath, and an enema of cold water; these soothed me into a quiet sleep, and seemed to prepare me for my coming trials. After the birth of the child, I was allowed to remain about an hour; I was then bathed in cool water, and linen towels wet in cold water were applied to the abdomen ."[127]

The hydropathic approach to childbirth is a clear example of the adherence to their theory about water being the best cure.

Hydropathic practitioners criticized the allopathic use of medication, unwarranted obstetrical operations, and bloodletting.[128] Instead they advocated the use of tepid baths during labor to promote relaxation and dilation of the cervix. They also recommended the use of vaginal injections to relax rigid cervixes.[129]

In the delivery of the placenta, the hydropathists were more conscientious of the dangers of retained placenta than were the Thomsonians. Shew regarded the delivery of the placenta to be more dangerous than the delivery of the child.[130] Interestingly enough though, Shew did not advocate immediate removal of the placenta. He suggested the use of manual means to remove the placenta, but noted that "there should be no hurry in the matter . . . in some cases the after-birth has remained in the womb for many days, in spite of all that doctors and nurses could do, the patient recovering in the end without harm."[131]

His statement does suggest that obstetricians should attempt to remove the placenta, but if unsuccessful, should not resort to drastic measures.

The hydropathic approach to postpartum care was as significant as their attitudes toward prenatal care. Shew advocated bathing the postpartum woman three or four times per day in seventy to eighty degree warm water. He argued that

> each and every ablution is found to produce the most salutary results; cleanliness is promoted, pains removed and prevented, the strength improved, the sleep rendered more sound and refreshing, and the general comfort and well-being of the patient in all respects enhanced.[132]

Allopathic practitioners opposed the use of postpartum baths. Samuel Cormany noted the struggle between himself, as a follower of hydropathy, and the midwife over the safety of postpartum baths.

> Mrs Cress did her work nicely – but would not consent to our wish that she might have a spongebath – said it would kill her – she would do what was best – as she knew – and her own notions were carried out as to Darling . . . Granny Cress left at about 10 ock. Soon after she had gone I gave Pet a general bath – and a little Soup at noon. Seemed to invigorate her a little – and rest her at once.[133]

Shew also supported the practice of applying a bandage to the abdomen, but suggested a modification to the standard practice: the bandage should be wet, in order to prevent slippage.[134]

The hydropathic approach to the management of natural labor allowed for more freedom of movement during labor and an alternative to stifling postpartum care of the allopaths, which consisted of almost total bed rest. Hydropathists used water in every stage of labor to promote relaxation, pain relief, and invigoration.

Significant Differences in the Approaches to the Management of Natural Labor

The key differences in the management of natural labor included: the use of medication, the ideal role of the parturient woman in the delivery room, the freedom of movement, and the management of a retained placenta. The Thomsonian and hydropathic approaches to natural labor were the least invasive. Although all approaches emphasized the importance of letting nature take its course, the homeopathic, eclectic and allopathic approaches seemed most likely to intervene. Although Thomsonians admonished allopaths for their interventions in the birth process, they did allow for the use of botanic medications during labor. With the exception of the use of baths, enemas, and vaginal injections, the hydropathic approach advocated no interference in the process.

A significant difference among the practitioners was in the treatment of the female patient. The homeopathic practitioner was not as concerned with issue of female modesty as was the eclectic practitioner. Indeed, the eclectic practitioner made a concerted effort to avoid placing himself or the woman in an embarrassing or immodest situation, provided that the labor was natural. In contrast, the regular obstetrician was more concerned with his own assertion of authority than of the comfort of his patient. The allopaths restricted the movement of the parturient woman, while all of the sects allowed for some movement. Of all of the sects, the homeopathic practitioner advocated the least movement, noting the danger that the woman could give birth in an inconvenient location if she were allowed to move freely during the second stage of labor. The other sects allowed for more movement.

The Thomsonians were the least likely to resort to manual or medical methods of placenta removal. The hydropathists also emphasized that no extreme actions should be taken to remove the placenta. The other sects all emphasized the importance of the early removal of the placenta and provided methods for placenta removal.

The Use of Obstetric Anesthesia

Figure 2: A Chloroform Mask Used in Early Obstetric Anesthesia.[135]

One of the most important medical developments of the nineteenth century was the use of anesthesia. The availability of chloroform and ether allowed medical specialties, such as surgery, and by extension, obstetrical surgery, to make unprecedented advances. The use of anesthesia challenged the notion of the necessity of pain in disease, surgery, and even childbirth.

On October 16, 1846, a dentist in Boston performed the first successful public demonstration of a modern anesthetic for surgery.[136] By January 1847, James Young Simpson, M.D., an influential obstetrician in Edinburgh, Scotland, had administered the first obstetrical anesthesia, in a case of deformed pelvis.[137] By April 1847, Fanny Appleton Longfellow, the wife of poet Henry Wadsworth Longfellow, had become the first woman in the United States to be anesthetized during childbirth, after she and her husband had persisted in requesting obstetric anesthesia. After the birth, she "wrote glowing comments about anesthesia to her friends and family, commenting that their fear for her safety had been unwarranted. She also chided Boston physicians for their 'timidity'."[138] Perhaps the most famous early use of obstetric anesthesia occurred in 1853, when John Snow, M.D., administered chloroform to Queen Victoria. Despite the growing patient demand for obstetric anesthesia, many physicians questioned not only the safety, but the moral implications of the use of anesthesia in childbirth.

Donald Caton, M.D., in his fascinating history on the use of obstetric anesthesia, identified several common arguments in opposition to obstetric anesthesia. Physicians debated the safety of anesthesia, for both the mother and the child.[139] Some expressed concern about placental transport, and the effect of anesthesia on the unborn and newborn child.[140] Others were concerned about the medical risks to the mother.

The introduction of obstetric anesthesia also provoked a debate about the nature of the pain of childbirth. Many people argued that women were biblically condemned to suffer the pains of childbirth. Caton notes,

> Simpson described his dismay when he learned how "patients and others strongly object to the superinduction of anaesthesia in labour,

> by the inhalation of ether or chloroform, on the assumed ground that an immunity from pain during parturition was contrary to religion and the express command of the scripture."[141]

These arguments clearly convey the sense of controversy surrounding the mid-century introduction of obstetric anesthesia. The allopathic and the various sectarian responses to the use of anesthesia reflect the continued conflict among the sects and the allopaths.

Allopathic Positions on the Use of Obstetric Anesthesia

In comparison to sectarian practitioners, the allopathic physicians were more likely to consider the use of anesthesia. Many allopathic practitioners asserted that obstetric anesthesia was both safe and efficacious. DeWees mentioned the acceptable administration of remedies for "inefficient pain." Fleetwood Churchill, M.D. mentioned, "In most obstetric operations, anesthesia appears to me to be of great use."[142] Henry Miller, M.D. argued that despite the objections raised against it, obstetric anesthetic was safe.

> It cannot be that any well-informed physician is not deterred by apprehension of fatal or even injurious consequences, for the safety of obstetric etherisation is completely established, there being not a single authentic instance of fatal termination that could be even plausibly ascribed to it.[143]

In his text on obstetrics another allopathic physician, Gunning S. Bedford, described chloroform and ether as safe and reliable methods of anesthesia.[144]

Allopathic practitioners were more accepting of the use of anesthesia in unusual cases of labor or in obstetrical operations than they were of its use in routine cases of

labor. Bedford did not recommend the use of anesthesia in natural labors.

> Again there is another argument, which has always struck me with force, why anesthesia should not be employed in a natural parturition, and it is this - the females, at the most interesting period of her life – the time of labor, should, all other things being equal, have her mind unclouded, her intellect undisturbed, her judgment fully adequate to realize and appreciate the advent of a new and important era in her existence - the birth of her child. Therefore, I shall advise you not to resort to anesthesia in natural and ordinary labors.[145]

Bedford's argument asserted the importance of a woman's state of mind during labor, and advocated conservative use of anesthesia. Churchill also cautioned against the employment of anesthesia in every case.[146]

Although a significant movement had begun within the allopathic community to legitimize the use of anesthesia in obstetrical cases, not all allopathic physicians approved of the use of obstetric anesthesia. Indeed, the use of anesthesia during labor, whether routine or complicated, became highly contested among allopathic physicians. For example, one regular physician wrote in 1855 about cases in which chloroform produced injurious effects. Dr. Robert Lee argued

> it was not wonderful that women, doomed to bring forth their offspring in pain and sorrow, should seek to escape from one of the troubles of our race by means of this treacherous poison, particularly when presented to them with such flattering assurances.[147]

In this case, the physician included moral arguments about the necessity of pain in childbirth, in addition to his medical arguments about actual harm caused by the use of anesthetics. The fact that Lee published the article demonstrates that a significant concern existed over the use of obstetric anesthesia. Meigs used his obstetric textbook as a forum to discourage the use of anesthesia in the delivery room. In the 1849 edition of his text he wrote, "I remain as yet unconvinced - either of the necessity for the method, or of its

propriety."[148] Meigs also argued that anesthesia could prevent obstetricians from gaining valuable and critical information from their patients.[149] Obstetricians relied on their patients to answer questions such as, "Does this hurt?" If one's patient was unconscious, one could not ask important questions, and could potentially injure the patient.

The allopathic conflict over anesthesia left many proponents of obstetric anesthesia frustrated at the impediments to the further development of the science. One allopathic physician criticized the extensive debates over anesthesia, when he wrote:

> It is much to be regretted that so much personal and party feeling has entered into the publications on the subject, instead of a simple desire to discover in what cases this new agent is admissible, and in what it ought to be rejected, with the reasons for such decisions.[150]

Despite the frustrations of the proponents of obstetrics anesthesia, the debate was to continue for many decades.

Although the allopaths experienced internal turmoil over the issue of anesthesia, a significant portion of the physicians utilized the innovation, and advocated further research and development. Many of the sectarian practitioners did not accept obstetric anesthesia as a valuable innovation.

Homeopathic Positions on the Use of Obstetric Anesthesia

Homeopaths strongly opposed the use of any anesthetic, such as chloroform or ether, because the nature of symptoms could not be determined and treated if the patient was unconscious.[151] Homeopathic emphasis on symptomatic treatment during labor

prevented the acceptance of anesthesia. Guernsey, for example, offered no arguments in favor of the use of anesthesia, and noted that the danger to the patient was not worth the risk.[152]

Eclectic Positions on the Use of Obstetric Anesthesia

Eclectics were far more enthusiastic about the use of anesthesia than were the homeopaths. Buchanan recommended the use of ether in the caesarian operation.[153] King advocated the use of chloroform or ether in cases of preternatural labor, or cases where the child presented in an unusual position. King argued that the anesthetic would produce a relaxed state, and thus facilitate the turning operation, in which the practitioner manipulated the child's position prior to birth.[154] In a case where the placenta presented before the child, King used chloroform. He justified his actions in his text.

> I well know that many entertain a strong and honest prejudice against the use of chloroform in labor, but from a not very limited experience of its use in my own private practice, as well as from the testimony of others in its favor, I should when treating a case of this nature, insist on its exhibition.[155]

King's statement reveals that, as within allopathic medicine, a controversy over anesthesia existed within the eclectic community. King's use of anesthesia is representative of the eclectic acceptance of some aspects of allopathic medicine.

Thomsonian Positions on the Use of Obstetric Anesthesia

Both Thomsonian sources were published in 1836, eleven years before the introduction of anesthesia to obstetrics. By the late 1840s, the use of Thomsonian

medicine had rapidly declined. Therefore, the Thomsonians did not participate in the debate over anesthetics in obstetrics.

Hydropathic Positions on the Use of Obstetric Anesthesia

According to Donegan, the hydropathic practitioners did not accept the use of anesthesia, and condemned the allopaths who advocated anesthesia as meddlesome midwives.[156] The hydropathic sources did not recommend the use of ether or chloroform in childbirth in their texts. Instead, they argued that by adhering to a hydropathic regimen, parturient women could significantly reduce the amount of time spent in labor.[157] They also argued that the hydropathic lifestyle promoted better pain management.[158] The use of baths and other water treatments during labor were also considered to be a form of pain reduction.[159]

Significant Differences in the Positions on the Use of Obstetric Anesthesia

As a highly controversial medical development, obstetric anesthesia was not fully accepted or widely used by any group. The allopaths were far more excited about the development of obstetric anesthesia. A significant number of allopaths advocated further research and use of the anesthesia, despite the opposition to its use. Very few allopaths advocated the use of anesthesia in all cases of labor. Of all of the sectarians, the eclectics were the most enthusiastic about anesthesia. They advocated the conservative use of anesthesia in complicated cases of labor. The homeopaths were staunchly opposed to anesthesia, due to their heavy reliance on symptomatic treatment, which would have been

impaired by the unconscious state of the patient. Thomsonian medicine had begun to decline prior to the introduction of anesthesia, and therefore did not participate in any significant degree in the debate. The hydropathic practitioners advocated water treatments and did not accept the use of anesthesia.

The Induction of Premature Labor

By the mid-nineteenth century, obstetricians noted the connection between physical deformities of the pelvis and the high incidence of necessary craniotomies and caesarian operations. In order to avoid the use of craniotomy or the caesarian operation, physicians began to experiment with the induction of premature labor. They hoped to eliminate the risk to the mother and the potential loss of a child by causing labor to commence earlier in the pregnancy, thus allowing a smaller infant to pass through a deformed pelvis. Allopaths, homeopaths, and eclectics employed different methods of induction, depending on their theories about medication and obstetrical intervention.

Allopathic Approaches to the Induction of Premature Labor

The induction of premature labor was considered by many allopathic obstetricians, like Edward Rigby, M.D., to be "perhaps the greatest improvement in operative midwifery since the invention and gradual improvement of the forceps."[160] One interesting point that Rigby mentioned was that in cases where a woman required the induction of labor in several successive pregnancies, subsequent labors may begin spontaneously at the time at which the earlier pregnancies were artificially induced.[161]

One method of inducing labor was introduced in 1854. This method involved deliberate irritation of the mammary glands by applying sucking-pumps to the nipples. The apparatus was applied several times over a period of three days. On the seventh day, labor commenced. Although this method took more time to accomplish, it carried minor side effects.[162]

Another method of inducing pregnancy was to inject "tar water" into the uterus, thus producing contractions. Labor commenced several days after the injection of the "tar water." In one case, a regular obstetrician used this method, rather than any other because it seemed less dangerous than the alternatives.[163] Eclectic criticism of the use of ergotine to induce labor suggests that it was also frequently used by allopaths.

The apparent allopathic interest in the development of new techniques of induction and the perfection of existing means of induction is consistent with the allopathic practitioners' attempts to innovate in the field of obstetrics. In medical journals and textbooks, allopathic practitioners offered new techniques and provided examples of the efficacy of techniques. Although many of the sectarian practitioners provided various means of inducing labor, the allopathic physicians seemed to be the most interested in developing new methods of induction.

Homeopathic Approaches to the Induction of Premature Labor

According to Guernsey, premature labor could be induced no earlier than the end of the seventh month of pregnancy. A practitioner should resort to the induction of labor only when a pelvic deformity or tumor prevented the passage of a full term infant through

the birth canal, or when the woman had been unable to give birth to a child at full term. Guernsey emphasized that the obstetrician should delay the induction for as long as was safe for the mother and child.[164]

Guernsey provided two methods of induction. The first involved applying approximately ten quarts of warm water directly to the os uteri, which softened the neck of the uterus and brought on contractions within one to two hours. The second method, which was more invasive, required the obstetrician to place a catheter into the uterus, without rupturing the membranes, and wait for contractions to begin. The practitioner mechanically dilated the os and ruptured the membranes.

While homeopaths offered induction of labor as an option for reducing the risk to the mother, they did not seem as enthusiastic as were the allopaths about the development of new techniques. The homeopaths also avoided the direct application of substances, other than water, to the os uteri, while allopaths suggested the use of "tar water" to induce labor.

Eclectic Approaches to the Induction of Premature Labor

King was in favor of the induction of premature labor in cases of pelvic deformity as it prevented potential harm to the mother and child that could occur if the obstetrician needed to perform a craniotomy or caesarian section. Another eclectic author, John Buchanan, argued that the induction of premature labor was preferable to a certain loss of the child through craniotomy.

> It is our duty, if we are aware of distortion, to recommend premature

> labor, in order to save the mother from a severer operation, and not only to recommend it, but to insist upon it. No woman has a right to require us to destroy successive children, when the induction of premature labor can supersede craniotomy.[165]

Like Guernsey, King mentioned that "the longer the child is allowed to remain within the uterus, compatible with safe delivery, the greater will be the chances in favor of its living subsequently."[166] Buchanan argued that the induction of labor saved approximately half of the children, when the loss would have been total if the physician had resorted to craniotomy or caesarian.[167] In contrast to Guernsey, King argued that induction of premature labor was also appropriate in cases where the mother suffers from a disease. Guernsey favored treating the disease rather than inducing labor.

Beach considered the perforation of the membranes with a catheter to be the safest and most effective method, and King agreed.[168] Buchanan also suggested that this method was the safest and strongly discouraged the use of instruments other than a catheter.[169] King and Buchanan also mentioned the insertion of a sponge into the os uteri, which served to dilate the os uteri and produce contractions. According to King, this method was preferable to rupturing the membranes, but was not as reliable. King considered the use of water applications to the os uteri as simple, and without injury to the mother or child. Another interesting method of induction was the use of electro-magnetic apparatus, although King did not seem to consider it a reliable method.

The eclectics' mention of many methods of induction is characteristic of their medical sect. The eclectics were open to suggestions and methods from many different sects, and usually discussed them without prejudice. They mentioned the danger of using

several of the techniques, but for the most part, provided a wide array of options in their texts.

Thomsonian Approaches to the Induction of Premature Labor

The Thomsonian texts did not include discussions of the induction of premature labor. This omission could be attributed to the intended audience of the Thomsonian works: laymen and their families. Indeed, the Thomsonians asserted that nearly all labors could be completed naturally, and did not give instructions as to the management of unusual cases.

Hydropathic Approaches to the Induction of Premature Labor

The hydropathic position on the induction of labor was similarly absent from the hydropathic texts. Like Thomsonians, hydropathists emphasized the large percentage of successful normal childbirths. However, as Jane Donegan has argued, many of the hydropathists had "converted" to hydropathy from allopathy, and probably had sufficient training to employ methods of induction if they chose to do so.[170]

Significant Differences in the Approaches to the Induction of Premature Labor

The allopathic, homeopathic, and eclectic practitioners recommended the induction of premature labor in complicated cases. The Thomsonian and hydropathic sects did not discuss the procedure. Instead, they emphasized the importance of allowing nature to take its course and the rarity of complications. In those who did recommend the

induction of labor, the conditions under which obstetricians considered an induction of labor did not differ, with the exception of King's inclusion of cases of disease in the mother. The methods of induction were considerably different. The eclectic and homeopathic practitioners tended to rely on less invasive procedures, without much emphasis on developing new techniques. The regular obstetricians were very interested in the development of new techniques and the improvement of existing techniques.

Use of the Forceps

Figure 3: Forceps Being Used to Deliver an Infant.[171]

Allopathic Use of Forceps

The regular physicians considered forceps to be an important instrument to aid somewhat difficult deliveries. Meigs argued that "the obstetric forceps is the child's instrument; that the perforator, the crotchet, and the embryotomy forceps are instruments for the mother."[172] In this sense, allopathic physicians regarded the forceps as life-saving instruments, as opposed to the fatal instruments used in last-resort craniotomies. Although allopaths professed a general acceptance of the use of forceps, many allopaths

cautioned obstetricians that the decision to use forceps should not be taken lightly. Gooch, for example, provided extensive instructions on the use of forceps, but cautioned, "do not think that I recommend the employment of instruments unnecessarily; for they are an evil, and are never introduced without some hazard."[173]

Gooch's admonition demonstrates that many allopathic physicians used discretion in the application of the forceps, despite sectarian allegation of the misuse of forceps. DeWees also addressed the arguments against the use of forceps.

> Let those who are to practice midwifery become well acquainted with its elements, before they commence it; then gradually proceed to the exercise of the more difficult operations connected with it, and the clamour against the use of forceps will, in great measure, cease, because there will be less reason for complaint.[174]

DeWees's comment reveals that he attributed the controversy over forceps to misapplication of the forceps by unqualified practitioners. One interesting aspect of the use of forceps is the issue of patient consent. None of the allopathic practitioners discussed the topic, although several sectarian practitioners mentioned having obtained patient consent.

Homeopathic Use of the Forceps

Homeopathic obstetricians were not opposed to the use of forceps in difficult deliveries, though homeopaths cautioned that a physician should "contribute as much as possible to remedy [complications in birth] by his gentle means, and thus avoid in great part the rude and painful use of hand and of instruments."[175] In one article, a homeopathic obstetrician mentioned that he used the forceps whenever the second stage of labor lasted

for over two hours and the patient's consent could be obtained.[176] In fact, Guernsey argued "Of all of the artificial means resorted to for the relief of women in childbed, the use of forceps is the most effective and results in the greatest saving of life to both mothers and children."[177] Guernsey suggested that the forceps may be used under several circumstances, including the exhaustion of the mother. A variety of sizes of forceps were available to the homeopathic obstetrician. Guernsey insisted that the obstetrician obtain permission from the woman before using forceps. He also argued that the obstetrician should not administer anesthesia while using the forceps, because pain was a simple indicator that the obstetrician should make adjustments to ensure the safety of the woman. Guernsey's book contained detailed images of the application of the forceps.[178]

Eclectic Use of the Forceps

The eclectics considered the forceps to be "the greatest improvement in operative midwifery."[179] One eclectic author argued that the success rate of the forceps was excellent and cited that the use of forceps saved fourteen out of fifteen children, and nearly all of the mothers.[180] King's description of the eclectic use of forceps was very similar to the description given by Guernsey. The conditions under which forceps should be used were identical to those described by Guernsey. King emphasized that the obstetrician should take into account the patient's individual history and behavior prior to applying the forceps. The application of forceps, according to King, should have been performed after considering both the symptoms of the patient and the lapse of time. King also obtained the consent of the woman before applying the forceps.[181]

King's opinion of the use of forceps was somewhat more conservative than Guernsey's assertions. King seemed more cautious in the decision to use forceps. Buchanan emphasized that "in no case is the forceps to be applied until we are satisfied that the obstacle cannot be overcome by the natural powers with safety to the mother and child."[182] Beach was one of the leading advocates of conservative use of the forceps. He criticized allopathic physicians for using the instruments when they were not necessary.[183] The eclectics preferred to allow labors to terminate naturally, but certainly would not have hesitated to use the forceps if they thought that the health of the mother or child was at risk.

Thomsonian Use of Forceps

The Thomsonians were strongly opposed to the use of the forceps in labor. The Thomsonians repeatedly accused allopaths and other sectarian physicians of using instruments, like forceps, unnecessarily to speed up labor, thus enhancing their professional reputations, with no consideration for the mother's health. Hersey asserted that

> In all our practice, we have never resorted to the forceps but twice; that was, when we were young and inexperienced. We were soon after convinced they might have been dispensed with without danger to either mother or child. . . The midwife who understands the principles of nature's operations in bringing forth children, will not resort to pincers, tongs, nor crowbars, to dig for babies.[184]

Hersey's statement is representative of the Thomsonian rejection of the use of any instruments in childbirth. His harsh statement also reveals the deep animosities that were present between Thomsonians and other medical sects.

Hydropathic Use of Forceps

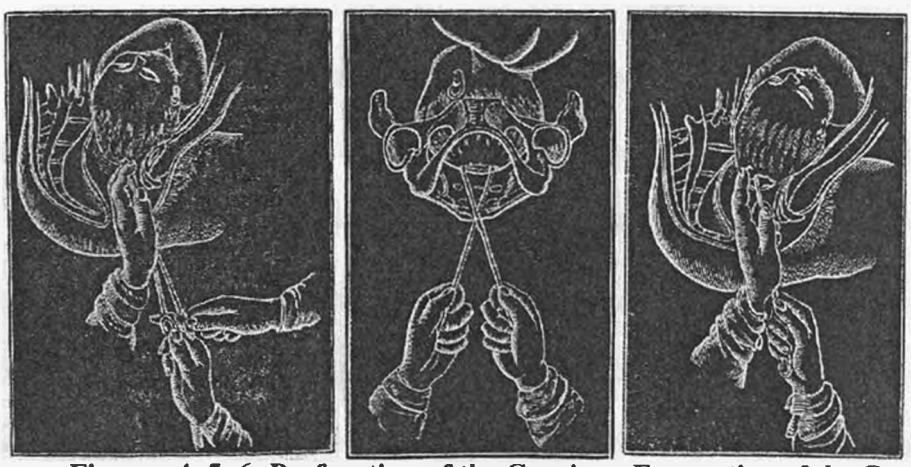
Unlike the Thomsonians, Hydropathists did not provide a strong argument against the use of forceps in childbirth. In fact, Shew's hydropathic text contained no mention of the use of forceps. Instead, the hydropathists emphasized the management of natural labor and the infrequency of complications in childbirth. But, as Donegan implied, the original allopathic training of hydropathic converts may have allowed them to use forceps if they were absolutely necessary in a complicated delivery.[185]

Significant Differences in the Use of Forceps

The Thomsonians were the only group to present a strong argument against the use of the forceps in labor. Among the allopaths, homeopathists, and eclectics, the use of forceps appeared to be a fairly universal method of extracting the child in a complicated labor. The methods of use did not vary greatly between homeopaths, eclectics, and regulars. Likewise, the symptoms that would indicate a need for the application of forceps were consistent. The only significant difference among the practitioners who used the forceps was the obtaining of the woman's consent. The homeopathist considered the woman's consent very important, as did the eclectic physician. In contrast, DeWees's account implied that consent for the medical procedure was not really necessary. The

hydropathists did not directly challenge the use of forceps, but they did not provide arguments in favor of their use.

The Use of Craniotomy



Figures 4, 5, 6: Perforation of the Cranium, Evacuation of the Contents of the Cranium, Removal of the Infant.[186]

A craniotomy involved the perforation of the infant's cranium and the removal of the contents of the cranium. In cases of pelvic deformity or obstruction, this procedure was performed in order to reduce the size of the infant's head to facilitate delivery. "The operation of craniotomy is dictated by that natural law of humanity which commands us to save the life of the mother if possible, even if it involve sacrifice of the child."[187]

While performing the procedure, the obstetrician was to be extremely careful and not puncture any surface other than the infant's head. After the perforation of the skull was completed using a perforation device the brain was destroyed using the perforator. The contents of the cranium were removed using the crotchet, and traction was applied to

the head. The infant could have been removed by using forceps designed for use in craniotomy procedures, or by using a crotchet.

Allopathic Use of Craniotomy

The use of craniotomy was a point of dispute within the ranks of allopathic medicine. Some practitioners argued that craniotomy should be used only if the child had already died, others advocated the use of craniotomy whenever the mother's life was in danger. The conservative use of craniotomy could be attributed to the allopathic interest in the Caesarian operation. Allopathic practitioners debated the value of the craniotomy procedure in textbooks and journal articles.

The use of craniotomy by some allopathic obstetricians, as described by Rigby, was somewhat more conservative than the use by some sectarian obstetricians. According to Rigby, if the obstetrician could determine that the child is still alive, labor should be allowed to progress and delivery should be attempted. Rigby stressed that the decision to perform a craniotomy was agonizing for the physician.

> Could he assure himself that it was alive, he would feel justified in either trusting still longer to the efforts of nature. . . if he could feel satisfied that the child had ceased to exist, he would have recourse to perforation. . . thus releasing the mother from the dangers of her situation.[188]

This conservatism differed from the approaches of the homeopathic and eclectic obstetricians as it did not emphasize the use of craniotomy in cases of pelvic deformity or enlargement of the head, when the child was still alive.

Some allopaths, particularly those who were influenced by British practitioners and their medical theories, preferred the craniotomy procedure to the caesarian operation. For example, Gooch argued that

> it may be said generally, that it is better to destroy the child, even unnecessarily, than allow symptoms to occur which will seriously endanger the life of the mother. My predecessor, Dr. Thyne, used to say, that you had better open six heads unnecessarily, than lose one woman.[189]

Gooch's argument reveals his concern with the mother's life over that of the child. Gooch's opinions were widely read and taught in medical schools in the United States. Despite Gooch's arguments, American physicians were clearly torn between recommending the use of the caesarian and recommending the use of the craniotomy.

Homeopathic Use of Craniotomy

According to the homeopath, craniotomy should have been performed when the child could not have been safely delivered without its use. Prior to the use of craniotomy, the obstetrician should have been certain that if the size of the head was diminished, that the mother would have been able to safely deliver the child. These cases of difficult delivery would have occurred if a pelvic deformity existed, or if the head of the fetus was unusually large. If the obstetrician was not sure whether the mother could safely deliver the child even with the craniotomy procedure, he should have opted for a caesarian operation in the hopes that both the mother and child could be saved. In general, though, the homeopaths did not dispute the use of craniotomy as much as did the allopaths.

Eclectic Use of Craniotomy

King emphasized the difficulty experienced by the practitioner when deciding to perform a craniotomy, but stressed that the main goal of the obstetrician was to preserve the mother's life. Buchanan called the procedure "an operation which, undertaken on good grounds, will save many mothers' lives."[190] In comparison to the allopathic controversy over craniotomy, the eclectics were fairly accepting of the procedure. This acceptance could be due to the eclectic aversion to the use of the caesarian operation.

The conditions under which craniotomy was acceptable were identical to those listed by Guernsey. King also provided a list of risks to the mother, including the accidental perforation of the vagina, uterus, or bladder. Another significant risk listed by King was the potential shock to the nervous system. The eclectic obstetrician recommended the administration of opium after the procedure, for the purpose of calming the mother's nerves and keeping her quiet.[191]

Thomsonian Use of Craniotomy

Like their position on the use of forceps, the Thomsonian opinion of the use of craniotomy is very negative. The Thomsonians argued that natural forces brought about successful labors, and did not provide instructions on how to deal with complicated childbirths. For example, in a rare reference to the use of instruments, Hersey asserted that in the management of childbirth, "no instruments of death are needed; no violence to

be used."[192] Furthermore, Hersey argued that physicians themselves caused the conditions that would later require the use of craniotomy.

> We have met with only three instances of the "locked head," as it is commonly called, in the course of our long and extensive experience. We think unseasonable interference, and the proud emulation of art to supplant the operations of nature, more commonly occasion these disasters than all other causes combined.[193]

Hersey's position was typical of the Thomsonian rejection of the use of obstetric operations and instruments.

Hydropathic Use of Craniotomy

Again, the hydropathic texts did not confront the use of craniotomy, nor did they contain any instructions for or arguments in favor of its use. It seems quite possible, though, that the hydropathic physicians could have resorted to this procedure in emergencies, thus relying on their allopathic training.

Significant Differences in the Use of Craniotomy

The allopaths were divided over the use of craniotomy versus the use of caesarian, but a significant number of allopaths were beginning to advocate the use of the caesarian. The homeopathists and the eclectics were not opposed to the use of craniotomy in cases of complicated labor. In fact, the eclectics were more likely to resort to craniotomy than they were to perform the caesarian operation. The hydropathists did not confront the issue, but probably had sufficient training to use the method if they felt that it was necessary. The Thomsonians were the only group to condemn the use of craniotomy.

The Use of the Caesarian Operation

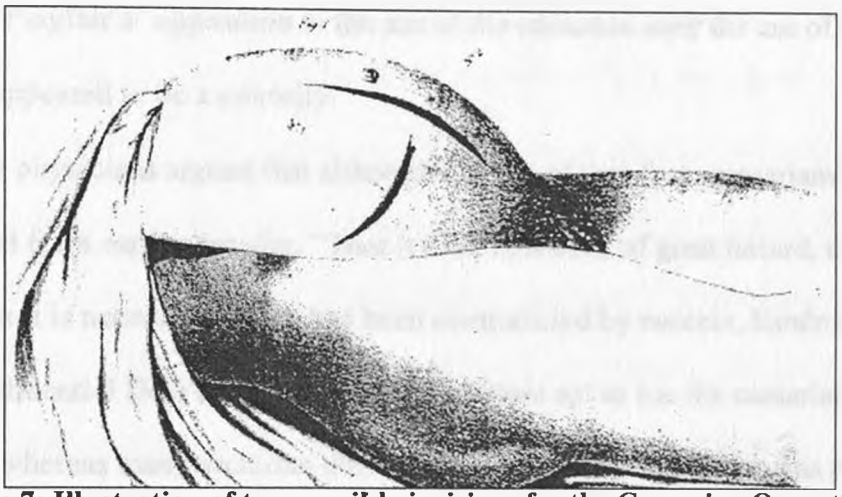


Figure 7: Illustration of two possible incisions for the Caesarian Operation.[194]

The caesarian operation was performed by making an incision on the linea alba. The uterus was then incised, and the membranes ruptured, the child carefully extracted, and the placenta removed. Guernsey stated that authorities on the caesarian operation vary as to their opinions on suturing the uterus. The abdominal wound was held together using silver wire sutures. The physician often applied a compress and bandage to the abdomen. The major risks of the operation were immediate shock, hemorrhage, inflammation of the uterus, and septicemic fever.[195]

Allopathic Use of the Caesarian Operation

The use of the caesarian operation was also a point of contention among allopathic obstetricians. For example, when one obstetrician taught that "even when delivery by craniotomy is possible, it can be justified on no principle, and is only sanctioned by the dogma of the schools or by usage, and that therefore the Caesarian

section should be performed with the view of saving the child," W.S. Playfair responded, "It would be a bold man who would perform the caesarian section on such grounds."[196] Playfair's' opposition to the use of the caesarian over the use of the craniotomy appeared to be a minority.

Other physicians argued that although the rate of loss from caesarians was high, it had decreased from earlier decades. "That it is an operation of great hazard, no one will deny; but that it is necessarily fatal, has been contradicted by success, hundreds of times," argued the influential DeWees.[197] Rigby seemed more apt to use the caesarian than the craniotomy, whereas many sectarian obstetricians considered craniotomy as preferable to the caesarian. In fact, Rigby argued that due to the increasing success rates of the operation, obstetricians should consider applying it "not only to those cases where the child cannot be delivered *per vias naturales*, but also to those cases of minor pelvic obstruction, where, if we feel sure of the child's death, we should have to recourse to perforation."[198] DeWees argued

> I am in favour of the Caesarian operation wherever there would be an absolute necessity for the use of the crotchet to the delivery of the child; and for the following reasons:
>
> First, because the child must inevitably be destroyed by the use of the crotchet.
>
> Secondly, because, from all I can learn, and all that I have seen in the employment of this instrument in cases of extreme deformity . . . the risk appears to be so great to the woman; and, as just stated, certainly fatal to the child."[199]

DeWees's argument suggests that many allopathic physicians were eager to improve the success rate of the operation. Bedford also argued in favor of the increased use of the caesarian operation. "I am quite confident, if the alternative were more opportunely resorted to; . . .the Caesarian operation would not only prove to be infinitely less destructive to human life than craniotomy, but that it would soon take its rightful place as a just expedient in the lying-in chamber."[200] The improvements made in the field of obstetric anesthesiology during the late nineteenth century probably encouraged allopaths to increase the use of the caesarian operation. Meanwhile sectarian physicians seemed less concerned with increasing the number of operations performed.

Homeopathic Use of the Caesarian Operation

The homeopathic use of the caesarian operation was very conservative. Guernsey described the procedure as somewhat sacrificial in terms of the mother's health, but acknowledged that under favorable circumstances, the mother and child may be potentially saved. Guernsey suggested that the obstetrician should have resorted to the caesarian operation only when he considered vaginal delivery impossible, due to pelvic obstruction or the death of the mother during delivery. According to Guernsey, the rate of loss of the mother in cases of caesarian operation was two-thirds, while the rate of loss of the child was one half. These large rates of loss prompted the homeopathic practitioner to consider the caesarian as a last resort.[201]

Eclectic Use of the Caesarian Operation

The eclectic opinion of the caesarian operation was similarly negative, and King also considered the caesarian as a last resort. He argued that it was less favorable than the use of forceps or craniotomy in cases of difficult labor. On a similar note, Buchanan called the caesarian "an operation of great antiquity" and argued that "nothing can justify us in performing this operation unless it is clearly and emphatically shown that the escape of both mother and child from certain death is impossible if it be neglected."[202] The situations under which the caesarian should have been performed, as described by King, were the same as those listed by Guernsey.

King also included the suggestion that tubal ligation be performed during the surgery, and did not consider the mother's consent to be important in the addition of this procedure. King recommended the administration of botanical anti-inflammatory medicines after the operation was complete.[203] Buchanan allowed for the use of opium and anti-inflammatory medications.[204] Buchanan's work also contained a mention of the use of anesthesia in the caesarian operation, as he advocated the use of ether.[205]

Thomsonian Use of the Caesarian Operation

The Thomsonian texts contain no mention of the caesarian operation. It is highly doubtful that the Thomsonians would have used the caesarian, in light of their views on the natural labor process. They probably considered the operation to be another example of meddlesome allopathic midwifery.

Hydropathic Use of the Caesarian Operation

The hydropathists did not mention the use of the caesarian operation. As with the use of craniotomy and the use of the induction of labor, many hydropathic practitioners would have had enough allopathic training to perform the operation when it was deemed necessary. The hydropathic practitioners probably would have used the caesarian only as a last resort in complicated labors.

Significant Differences in the Use of the Caesarian Operation

The allopaths were the only group to advocate an increased use of the caesarian operation, although internal conflicts over the procedures were quite apparent. In contrast, the homeopaths and eclectics used the procedure as a last resort. The Thomsonians did not directly confront the use of the Caesarian operation, but judging from their response to the use of craniotomy and other procedures, they would have considered the operation as unsafe and meddlesome. Like the Thomsonians, the hydropathists did not debate the use of the caesarian. They probably had adequate training to perform the operation if necessary, but in view of their emphasis on natural labor, would have been very hesitant to use the procedure.

Conclusions

The various groups of obstetricians offered very different approaches to obstetrics. While many allopathic physicians advocated the use of harsh purgatives and bloodletting during pregnancy and labor, the sectarians offered alternatives to

such severe treatments and criticized the allopathic physicians for their meddlesome practices. The allopathic medical community relied on traditional medical theories when prescribing treatments for pregnant women, while encouraging innovation and experimentation with new techniques and methods. The sectarians offered treatments based on their newly developed medical theories, but were not as interested in the development of new techniques. Possibly, the allopathic practitioners' interest in the development of new techniques was a response to the new options offered by sectarian practitioners. In order to maintain their share of the patient market, the allopathic practitioners sought to portray themselves as the wielders of cutting-edge technology, while remaining loyal to traditional medical theories.

The sectarians were more likely to adhere to the notion that pregnancy was a natural condition, and that labors would progress safely without any interference on the part of the midwife. They argued that allopathic obstetricians made unnecessary interventions in the natural birth process. Sectarians implied that allopaths were more concerned with emphasizing the necessity of the obstetrician and enhancing their professional reputations than they were about their patients' safety. While the sectarian accusations probably had some merit, the allopathic practitioners did not advocate unnecessary use of obstetric operations. The allopathic obstetricians did seem the most likely to intervene in cases that they perceived to be complicated.

III. WOMEN'S HEALTH CARE EXPERIENCES WITH ALLOPATHIC AND SECTARIAN OBSTETRICIANS

Allopathic and sectarian approaches to obstetrics produced unique health care experiences for women. Obstetric texts reveal allopathic physicians' concern with establishing a power dynamic within the delivery room with the attending physician as having the most control over the birth. The allopathic practitioners also seemed to be the most concerned about preserving female modesty during childbirth. This concern could be attributed to the continuing controversy over the propriety of male obstetricians. In contrast, not all of the sectarian practitioners concerned themselves with establishing and maintaining control in the delivery room. Instead, they advocated that the parturient woman take a more active role in the delivery. The sectarians were also less concerned about the issue of modesty. The various sectarian practitioners criticized allopaths for their continued efforts to make themselves appear indispensable. The sectarians also asserted that, for the most part, women would be better off with no medical interference during childbirth. These differences contributed to a very different health care experience for women in childbirth.

One of the key differences between allopathic and sectarian obstetrics was in the rapport between the patient and the physician. In their writings, allopathic practitioners did not focus on the comfort of the patient; instead they tended to raise concerns about their control within the delivery room. One of the clearest examples of an allopathic physician asserting his control during childbirth can be seen in

DeWees's work, "let her yield entirely to his directions, for she cannot fail to know less than her physician; therefore she is not entitled to be her own directress . . . she must have no opinions of her own, as regards her physical and medical treatment: submission is her duty."[206] DeWees's comment emphasized that the medical professional had superior training to the average woman, and therefore deserved her unquestioning submission. His opinion is an example of the allopathic tendency to assert that a medically trained obstetrician was necessary to ensure a safe childbirth.

In contrast, sectarian practitioners tended to emphasize that most women would have successful childbirths, with or without a medical professional. In fact, all of the sectarian practitioners criticized the allopathic obstetricians for making physicians appear indispensable, while possibly harming their patients with unnecessary procedures. Sectarian physicians were more likely to address the issue of rapport between the patient and the physician. For example, as an eclectic physician, Buchanan taught "when called to a patient, our first object should be to establish with her a degree of friendly and familiar confidence, which will make our aid agreeable. This is very necessary; the want of it often makes the labor protracted and severe."[207] In contrast to DeWees's strict admonitions about control in the delivery room, sectarian practitioners like Buchanan recognized the importance of establishing a comfortable relationship between the patient and the physician.

The sectarians, unlike the allopaths, were not as concerned about exerting their influence in the childbirth process. They tended to reassure women that childbirth was a natural and safe process, while criticizing allopathic practitioners for asserting otherwise. Howard, a Thomsonian practitioner, assured female patients

> Believe the truth, when pregnant, that in all human probability, you will do perfectly well; that the most ordinary women can render you every needful assistance, without the interference of men midwives. Their hurry, their spirit for acting, have done the sex more harm than all the injudicious management of midwives, of which they are so fond of talking.[208]

The sectarians were clearly critical of the allopathic attempts to place the obstetrician in a position of indisputable power. They were far more likely to allow women to play an active role in pregnancy and childbirth.

Allopathic obstetricians also tended to be very concerned with issues of female modesty. The propriety of the obstetricians' very presence in the delivery room was still under debate, and the allopathic practitioners were well aware of this precarious situation. With this complication in mind, allopaths instructed obstetricians to consider female modesty during childbirth. Gooch's mention that he never stayed in the delivery room, when he could avoid it, reveals that the average allopathic practitioner was probably uncomfortable when attending childbirths. Meigs's suggestion that a third person be present during all examinations also reveals a concern for modesty.[209] This discomfort and extensive attention to modesty would have produced a very different childbirth experience for a woman. In both allopathic and sectarian childbirths, women would have relied on friends and family members for support, as the physicians may not have been present for much of the labor. Although friends and family would have provided emotional support, the allopathic obstetrician emphasized that his instructions were the most important, and that all others were to be disregarded. In an allopathic childbirth, the obstetrician emphasized a power dynamic, in which he was the sole authority.

The discussion of the issue of modesty varied slightly among sectarian obstetricians. King, as an eclectic practitioner, devoted a small portion of his book to a discussion of modesty. For example, he recommended that another woman should apply the abdominal bandage. King's attention to modesty was not as obvious as the allopathic discomfort with the issue of modesty. For the most part, sectarian practitioners did not provide extensive instructions on maintaining female modesty. The lack of sectarian attention to this matter could be attributed to the participation of women in sectarian medicine. Unlike most allopathic practitioners, sectarian physicians encouraged women to obtain medical training as obstetricians. It was more likely that a female patient would have had access to a female sectarian obstetrician, and therefore could have avoided the modesty issue. Moreover, the sectarian lack of concern about asserting control would have allowed parturient women to rely even more on nurses, friends and family members during childbirth. Unlike allopathic physicians, sectarian physicians did not emphasize the importance of being the sole authority. Instead of asserting that women absolutely needed a medically trained professional present for her birth, sectarians assured women that childbirth was a natural and safe process, with or without the presence of a medically trained professional.

Allopathic practitioners also tended to disregard patient testimony, in favor of relying on scientific methods of deduction. For example, Gooch asserted that physicians should wait a full six months after the last menses before diagnosing a woman as being pregnant, in order to ascertain fetal movement and heartbeat.[210] Although allopathic physicians were probably concerned about women seeking

abortions, their continued assertions about the reliability of patient testimony reveal that physicians' observations were more important than the observations of the patient. Allopaths did not consider a woman's knowledge of her own body to be reliable evidence. They did not expect, nor did they recommend that women take an active role in their own health care. Instead, allopathic policies emphasized the necessity of a medically trained physician.

Sectarian physicians opposed the notion that a medically trained physician should attend an ignorant patient. They alleged that allopaths deliberately kept women ignorant of the natural childbirth processes to enhance their own status as educated medical professionals. To combat this ignorance, sectarian physicians sought to educate women about pregnancy and childbirth through books and journals. Mary Louise Shew, the wife of the prominent hydropathic obstetrician, Joel Shew, wrote

> We do not believe, as some tell us, that women should not understand the functions of her system; nor that such knowledge would be prejudicial to health in childbearing. We do not believe that it was "ordained" that women should suffer any thing like she now does, in her present state of knowledge. We do believe, we do know, that woman might so understand the laws of her system, and so live, that in this period of suffering, and often fatality, there would be a comparative immunity from those dangers and evils now so terrible.[211]

Hydropathic medicine also allowed women to use medical journals as a forum for open discussion of issues related to childbirth and pregnancy.[212]

Likewise, Thomsonian physicians attempted to educate women about childbirth by publishing guides to midwifery, written for a lay audience. Hersey concludes his guide with the following statement

> We respectfully solicit the attention of all married women – inviting them to read and understand our little volume, that may now reach their hand. Will you instruct your daughters, imparting to them every useful instruction you have obtained by our instrumentality? If your daughters are too delicate and modest to receive this instruction of a mother on these subjects, they should be too delicate and modest to marry and cohabit sexually with their husbands.[213]

Hersey's statement emphasized the importance of women's knowledge about childbirth and pregnancy. His statement was typical of the sectarian approach to women's education about childbirth. Howard also noted that women should be better educated about childbirth.[214] Sectarian obstetricians also tended to allow women more freedom during childbirth. For example, allowing women to move during labor, or to choose their own position during the birth. Women who consulted sectarian physicians were more likely to be encouraged to take an active role in their prenatal care and their childbirth.

The sectarian practitioners criticized the allopathic obstetricians for their lack of attention to the education of female patients about childbirth. Indeed, the sectarians implied that the allopaths deliberately kept patients ignorant to ensure that obstetricians would remain in demand. Sectarians also recognized the importance of creating a good rapport between patient and physicians, while the allopaths focused on establishing and enforcing their own control and influence during childbirth. These different attitudes and practices of obstetricians certainly affected the childbirth experience for many women.

IV. CASES OF MALPRACTICE

The various approaches to obstetrics did not just produce a unique health care experience for the female patient; they also resulted in controversies over the proper obstetric techniques. Debates transpired within medical journals and textbooks, but the controversies also reached the courts. When a patient was injured by a certain technique or did not receive adequate care, the patient relied upon the legal system to seek compensation or to see the physician punished. The mid-nineteenth century represented the starting point for an increase in the number of malpractice suits against physicians. In this period, individual physicians "looked more and more like individual entrepreneurs in an intensely competitive marketplace."[215] As a result of this change in the public's perception of the physician, patients began to demand better treatment from their physicians, and began to sue physicians for "failing to prevent or for apparently inflicting permanent disabilities and deformities; for failing to deliver on an implied contract of full recovery or restoration."[216] The public sentiment against licensing laws in the 1830s had prevented the allopathic medical community from creating regulations that would attempt to standardize the field, and therefore the patients themselves would regulate the medical field through medical malpractice suits.[217]

While allopathic practitioners sought to regulate the medical educational system through legislative efforts, they also attempted to defeat sectarian medicine in the courts. When sectarian practitioners were on trial for malpractice, allopathic

physicians saw an opportunity to discredit the individual sectarian, as well as the sects' medical theories. Allopathic practitioners testified against sectarians in cases of malpractice. While cases of malpractice presented allopathic practitioners with an opportunity to publicly criticize sectarian medical practices, the cases of malpractice tended to backfire on the allopathic physicians.

Allopathic physicians used cases of malpractice to demonstrate the ineptitude of sectarian practitioners and called for legislation to protect innocent citizens from the sectarian practitioners. In 1837 an allopathic physician complained that

> evidence is, on such occasions, received with such suspicion and disfavor by juries; so that, in fact, all the pains and penalties declared against the irregular practitioners of medicine have for years become a dead letter . . . on almost all occasions the sympathy of the public has been on the side of the offending party, while nothing but odium has fallen to the share of the medical profession, for siding with the prosecution.[218]

In 1848, in a case of alleged obstetric malpractice, a Thomsonian practitioner was tried for malpractice on the grounds that he did not remove the placenta. The Thomsonian was convicted, but the Iowa Supreme Court overturned the conviction, stating that "no particular system of medicine was favored by the laws of Iowa and that the people are free to select from the various classes of medical men."[219] In another case of obstetric malpractice, in 1864, the case was dropped because of the wide range of medical testimonies.[220] These cases clearly demonstrate that during the mid-nineteenth century, the courts and the public were unwilling to recognize allopathic medicine as the best form of medicine. Indeed, these cases illustrate the public concern with allowing for people's freedom to choose among many systems of medicine.

In addition to the evident public opposition to allopathic testimony against sectarian practitioners, allopaths found their own medical system to be scrutinized in the courts. Instead of being a forum from which allopathic practitioners could discredit and eliminate the threat of sectarian competition, the courts presented an opportunity for patients to lodge complaints against allopaths and sectarians.

> Over and over during the 1840s and 1850s, however, the nation's best-educated and most professionally minded physicians observed with a sort of defensive incredulity and disbelieving horror that many, if not most, of the burgeoning numbers of malpractice suits were being lodged not against charlatans and amateur hacks, but against others like themselves: successful regular doctors.[221]

So, while allopaths had hoped to use the increasing popularity of malpractice lawsuits to their advantage, public sentiment had prevented allopaths from significantly discrediting the sectarians. Indeed, the many malpractice suits against allopathic practitioners revealed that the American public was prepared to criticize physicians from all medical sects in cases of malpractice.

Allopaths used their medical journals as forums to discuss cases of medical malpractice and the need for state legislation and licensing laws. As late as the 1880s, allopathic practitioners continued to use malpractice cases as evidence of the dangerous consequences of sectarian medicine; and to call for licensing laws to remove that danger. In the widely read Boston Medical and Surgical Journal, an allopathic physician recounted the malpractice grand jury trial of a sectarian obstetrician, in a case of death from an undelivered placenta. The sectarian obstetrician on trial was "an irregular practitioner of newspaper fame."[222] Despite the testimony of several allopathic practitioners, the sectarian was not indicted for malpractice. In response to these events, the allopathic author wrote, "Is it not the duty of the Legislature to form such laws as will at least protect the ignorant from

such malpraxis? Other States have done this long ago."[223] The malpractice suits by themselves did not serve to advance the allopathic cause. Instead they further encouraged allopathic physicians to seek state legislation to regulate the medical profession and to drive the sectarians out of the market.

V. CONCLUSION

The conflicts between allopathic physicians and sectarian physicians extended to the specialty of obstetrics. As the groups of practitioners each adhered to different medical theories, the groups developed distinct approaches to obstetrics. Using the courts, the textbooks and the medical journals as forums for debate, every group sought to prove that their own method was the safest and most effective. Each group also confronted the common challenges within the field of obstetrics, like issue of gender, in a unique way. The different approaches to pregnancy and childbirth resulted in very different experiences for female patients.

The strong public support for sectarian medicine reveals that the American public was not satisfied with the allopathic treatments. Rather, they welcomed the introduction of milder treatments and attempted to protect the sects from restrictive laws. The popularity of the sectarian approaches to obstetrics is further evidence that many patients did not accept the allopathic approaches to obstetrics. Sectarian medicine frequently advocated the rejection of sedentary lifestyles and encouraged women to take an active role in prenatal care. The sects also allowed for less intervention in the natural childbirth processes. Although none of the individual sects ever evolved into the dominant force in American medicine, their opposition to severe allopathic treatments, along with support from a significant number of patients, prompted allopathic physicians to gradually alter their treatments.

As a result of the sectarian competition, allopathic practitioners were forced to focus on improving their own system of medicine and retaining their own patients. The formation of the American Medical Association was an allopathic effort to organize themselves into a cohesive medical community. The AMA provided an opportunity for allopathic practitioners to evaluate their own medical schools, to insist on better educational systems, to discuss their medical theories and to promote innovations and improvements to the existing medical practices. The AMA attempted to coax the general public back to allopathic medicine by making improvements to the existing systems. Eventually, they were successful in their efforts. Although the sectarian movement represented a significant source of competition to allopathic physicians in the mid-nineteenth century, by the end of the nineteenth century allopathic physicians had emerged as the dominant force in American medicine and consequently, as the dominant force in American obstetrics.

Despite the eventual triumph of the allopathic physicians, controversy has surrounded the field of obstetrics well past the end of the sectarian movements. Today's obstetricians and midwives still grapple with many of the same issues as the sectarians and allopaths were arguing over in the mid-nineteenth century, such as the proper level of intervention on the part of the practitioners, the value of obstetric anesthesia, the induction of premature labor, and the use of the caesarian operation. The persistence of these conflicts illustrates that although allopathic medicine emerged as the most widely accepted form of medicine, alternatives to the orthodox treatments have survived, in one form or another.

NOTES

1. Coulter, Harris L. Divided Legacy: Science and Ethics in American Medicine: 1800-1914. Richmond, California: North Atlantic Books. 1973. p. 5.

2. Donegan, Jane B. "Hydropathic Highway to Health": Women and Water-Cure in Antebellum America. New York: Greenwood Press, 1986. p. 9.

3. Donegan, p. 10-11.

4. Donegan, p. 8.

5. Coulter, Harris L. Political and Social Aspects of Nineteenth-Century Medicine in the United States: The Formation of the American Medical Association and its Struggle with Homeopathic and Eclectic Physicians. Ann Arbor, Michigan: University Microfilms, Inc., 1970. p. 134-136.
See Also: Mohr, James C. Doctors and the Law: Medical Jurisprudence in Nineteenth-Century America. New York: Oxford University Press, 1993. p. 87-89.

6. Donegan, p. 12.

7. Newton, p. 10-11.

8. Mohr, Doctors and the Law: Medical Jurisprudence in Nineteenth-Century America, p. 89.

9. Coulter, Divided Legacy: Science and Ethics in American Medicine: 1800-1914, p. 6.

10. Coulter, Divided Legacy: Science and Ethics in American Medicine: 1800-1914, p. 26.

11. Colby, Benjamin. A Guide to Health; Being an Exposition of the Principles of the Thomsonian System of Practice. Nashua, New Hampshire: Charles T. Gill, 1844. p. 29.

12. Coulter, Divided Legacy: Science and Ethics in American Medicine: 1800-1914, p. 119.

13. Cassedy, James H.. Medicine in America: A Short History. Baltimore, Maryland: The Johns Hopkins University Press, 1991. p. 38.

14. Coulter, Divided Legacy: Science and Ethics in American Medicine: 1800-1914, p. 110-112.

15. Coulter, Divided Legacy: Science and Ethics in American Medicine: 1800-1914, p. 114-115.

16. Coulter, Divided Legacy: Science and Ethics in American Medicine: 1800-1914, p. 113.

17. Paine, William (M.D.). An Epitome of the American Eclectic Practice of Medicine. Philadelphia: Cowperthwait and Co., 1857. p. 7-8.

18. Hering, Constantine (M.D.). A Concise View of the Rise and Progress of Homeopathic Medicine. Philadelphia: The Hahnemannean Society, 1833. p. 29.

19. Haller, John S. (Jr.). A Profile in Alternative Medicine: The Eclectic Medical College of Cincinnati, 1845-1942. Kent, Ohio: Kent State University, 1999. p. xi.
See also: Coulter, Divided Legacy: Science and Ethics in American Medicine: 1800-1914, p. 93.

20. Cassedy, p. 38.

21. Newton, Robert S. (M.D.). History of American Eclectic Medicine, Its Schools and Literature. Brooklyn, New York: Wm. C. Wilton, 1864. p. 7.

22. Schultz, Suzanne M. "Sectarian Medical Periodicals of Pennsylvania, Part One – Development of the Sects" Pennsylvania Medicine. (September 1987), p. 69.

23. Haller, p. 13.

24. Donegan, p. 13.

25. Ibid.

26. Coulter, Divided Legacy: Science and Ethics in American Medicine: 1800-1914, p. 92.

27. Schultz, p. 70.

28. Coulter, Divided Legacy: Science and Ethics in American Medicine: 1800-1914, p. 92.

29. Donegan, p. 13.
See also: Coulter, Divided Legacy: Science and Ethics in American Medicine: 1800-1914, p. 93.

30. Coulter, Divided Legacy: Science and Ethics in American Medicine: 1800-1914, p. 93.

31. Legan, Marshall Scott. "Hydropathy, or the Water-Cure". Pseudo-Science and Society in Nineteenth Century America. (Arthur Wroebel, ed.). Lexington, Kentucky: The University Press of Kentucky, 1987. p. 74-75.

32. Legan, p. 75.

33. Shew, Joel (M.D.). Handbook of Hydropathy. New York: Wiley and Putnam, 1844. p. iii.

34. Cayleff, Susan E. Wash and Be Healed: The Water-Cure Movement and Women's Health. Philadelphia: Temple University Press, 1987. p. 100-101.

35. Colby, p. 31.

36. Paine, p. 7-8.

37. Leavitt, Judith Walzer. Brought to Bed: Childbearing in America, 1750-1950. New York: Oxford University Press, 1986. p. 12.

38. Leavitt, p.12.

39. Leavitt, p. 39.

40. Bonner, Thomas Neville. To the Ends of the Earth: Women's Search for Education in Medicine. Cambridge, Massachusetts: Harvard University Press, 1992. p. 22.

41. Abram, Ruth J. (ed.). Send Us a Lady Physician: Women Doctors in America, 1835-1920. New York: W.W. Norton and Co., Inc., 1985. p. 45.

42. Bonner, p. 15-16.

43. Donegan, p. 86.

44. Cayleff, p. 69.

45. Gooch, Robert (M.D.). An Account of Some of the Most Important Diseases Peculiar to Women. Philadelphia: Ed. Barrington and Geo. D. Haswell, 1848. p. 174-175.

46. Guernsey, Henry N. (M.D.). The Application of the Principles and Practice of Homeopathy to Obstetrics and the Disorders Peculiar to Women and Young Children. New York: Boericke and Tafel, 1881. (First Edition, 1873). p. 109.

47. King, John (M.D.). American Eclectic Obstetrics. Cincinnati: Moore, Wilstach, Keys, and Co., 1855. p. 96.

48. Meigs, Charles D. Obstetrics: The Science and the Art. Philadelphia: Lea and Blanchard, 1849. p. 239.

49. Gooch, Robert (M.D.). A Practical Compendium of Midwifery. Philadelphia: Haswell, Barrington, and Haswell, 1840. p. 102.

50. Montgomery, E.E. (M.D.). "The Value of External Examination and Manipulation as a Means of Diagnosis in Obstetrics" Medical and Surgical Reporter. Philadelphia. Vol. XLIX, No. XV. (October 13, 1883) p. 393-397.

51. Gooch, A Practical Compendium of Midwifery, p. 104-105.

52. Denig, George (M.D.). The Domestic Instructor in Midwifery. Mconnellsburg, Penn.: George Denig, 1838. P. 58-60.

53. Gooch, A Practical Compendium of Midwifery, p. 109.

54. Guernsey, p. 109-128.

55. Kane, Elisha Kent. "Experiments on Kiesteine, with observations on its application to the diagnosis of pregnancy" The American Journal of Medical Sciences. Vol. IV No. VII (July 1842). p. 2.

56. Kane, p. 2-32.

57. Guernsey, p. 125.

58. Pulte, J.H. (M.D.). Homeopathic Domestic Physician. Cincinnati: Smith and Parks, 1874. p. 476-477.

59. Croserio, C. (M.D.). Homeopathic Manual of Obstetrics. Cincinnati: Moore, Anderson, Wilstach and Keys, 1853.

60. Pulte, p. 476-477.

61. Beach, Wooster (M.D.). An Improved System of Midwifery, Adapted to the Reformed Practice of Medicine. New York: Jas. McAlister, 1847. p. 62.

62. Beach, p. 62.

63. Beach, p. 65.

64. Buchanan, John (M.D.). A Practical Treatise on Midwifery and Diseases of Women and Children. Philadelphia: John Buchanan, 1868. p. 74.

65. Beach, p. 65.

66. King, p. 98-127.

67. Shew, Handbook of Hydropathy, p. vii.

68. Howard, Horton. An Improved System of Botanic Medicine (vol. 3). Columbus, Ohio: Howard, 1836. p.iv-v.

69. Hersey, Thomas. The Midwife's Practical Directory. Baltimore: Published by the author, 1836. (Reprinted by New York: Arno Press, 1974). p. 98.

70. Hersey, p. 95.

71. Hersey, p. 96.

72. Howard, p. 31.

73. Ibid.

74. Hersey, p. 100.

75. Hersey, p. 105.

76. Donegan, p. 104.

77. Shew, Joel (M.D.). The Hydropathic Family Physician. New York: Fowler and Wells, 1856. p. 727.

78. Ibid.

79. Shew, The Hydropathic Family Physician, p. 728.

80. Donegan, p. 87.

81. Ibid.

82. Donegan, p. 96.

83. Cayleff, p.60.

84. Ibid.

85. Guernsey, p. 171.

86. Guernsey, p. 174-179.

87. Mauriceau, A.M. (M.D.). The Married Woman's Private Medical Companion. New York: Mauriceau, 1847. (Reprinted, New York: Arno Press, 1974). p. 186.

88. DeWees, William P. (M.D.). A Compendious System of Midwifery. Philadelphia: Lea and Blanchard, 1843. p. 183.

89. DeWees, William P. (M.D.). A Treatise on the Physical and Medical Treatment of Children. Philadelphia: Carey, Lea, and Blanchard. 1838. p. 46-47.

90. Gooch, A Practical Compendium of Midwifery, p. 143-144.

91. Bell, Joseph (M.D.). "On the Management of the Placenta" The American Journal of Medical Sciences. Vol. 4 (July 1842) p. 212.

92. Meigs, p. 299.

93. Bell, p. 212.

94. "Detachment of the Placenta by injection of the Funis" The American Journal of Medical Sciences. Vol. 3-4 (1828-1829) p. 224.

95. Guernsey, p. 193.

96. Guernsey, p. 197.

97. Guernsey, p. 202.

98. Guernsey, p. 204.

99. Guernsey, p. 208.

100. King, p. 234.

101. King, p. 252.

102. King, p. 234.

103. Buchanan, p. 227.

104. King, p. 237.

105. Beach, p. 112.

106. King, p. 264.

107. Buchanan, p. 209-210.

108. Hersey, p. 138-139.

109. Ibid.

110. Howard, p. 145.

111. Howard, p. 82.

112. Howard, p. 112.

113. Hersey, p. 142-145.

114. Howard, p. 135.

115. Howard, p. 139.
See Also: Hersey, p. 151.

116. Hersey, p. 151.

117. Howard, p. 126.
See Also: Hersey, p. 167.

118. Hersey, p. 164.

119. Howard, p. 128.

120. DeVille, Kenneth A. Medical Malpractice in Nineteenth Century America. New York: New York University Press, 1990. p. 51.

121. Hersey, p. 171.

122. Donegan, p. 90, 113.

123. Shew, The Hydropathic Family Physician, p. 731.

124. Donegan, p. 91.

125. Donegan, p. 92, 115.

126. Mohr, James C. (ed.). The Cormany Diaries: A Northern Family in the Civil War. Pittsburgh: University of Pittsburgh Press, 1982. p. 192.

127. Cayleff, p. 61.

128. Donegan, p. 115.

129. Donegan, p. 113-114.

130. Shew, The Hydropathic Family Physician, p. 737.

131. Shew, The Hydropathic Family Physician, p. 735.

132. Shew, The Hydropathic Family Physician, p. 737.

133. Mohr, The Cormany Diaries: A Northern Family in the Civil War, p. 192-193.

134. Shew, The Hydropathic Family Physician, p. 738.

135. Wertz, Richard W. and Dorothy C. Lying-In: A History of Childbirth in America. New Haven: Yale University Press, 1989. p. 116.

136. Caton, Donald (M.D.). What a Blessing She Had Chloroform: The Medical and Social Response to the Pain of Childbirth from 1800 to the Present. New Haven: Yale University Press, 1999. p. 4.

137. Caton, p. 3.

138. Caton, p. 26.

139. Caton, p. 28.

140. Caton, p. 72.

141. Caton, p. 103.

142. Churchill, Fleetwood (M.D.). On the Theory and Practice of Midwifery. Philadelphia: Blanchard and Lea, 1862. p. 245.

143. Miller, Henry (M.D.). The Principles and Practice of Obstetrics. Philadelphia: Lea and Blanchard, 1858. p. 448.

144. Bedford, Gunning S. (M.D.). The Principles and Practice of Obstetrics. New York: William Wood and Company, 1868. p. 724.

145. Bedford, p. 723.

146. Churchill, p. 246.

147. Lee, Robert (M.D.). "Seventeen Cases of Parturition in which Chloroform was Inhaled was Injurious Effects" The American Journal of Medical Sciences. Vol. 29 (January 1855) p. 256.

148. Meigs, p. 316.

149. Meigs, p. 326.

150. Churchill, p. 244.

151. Guernsey, p. 196-197.

152. Ibid.

153. Buchanan, p. 185.

154. King, p. 400-401.

155. King, p. 444.

156. Donegan, p. 115.

157. Cayleff, p. 60-61.

158. Donegan, p. 91.

159. Ibid.

160. Rigby, Edward (M.D.). "A System of Midwifery" The American Journal of Medical Sciences. Vol. 4 (July 1842) p. 129.

161. Rigby, p. 130.

162. "New Method of Inducing Premature Delivery" The American Journal of Medical Sciences. Vol. 27 (January 1854) p. 254.

163. Blatchford, Thomas W. (M.D.). "Report of a Case of Premature Labor, Artificially Induced, With Successful Results, On Account of Contracted Pelvis" Buffalo Medical Journal and Monthly Review of Medical and Surgical Science. Vol. 6, No. 1 (June 1850) p. 30-34.

164. Guernsey, p. 283.

165. Buchanan, p. 179.

166. King, p. 563.

167. Buchanan, p. 159.

168. Beach, p. 178.

169. Buchanan, p. 160.

170. Donegan, p. 115.

171. Spratt, G. Obstetric Tables. Philadelphia: James A. Bill, 1850. p. 28.

172. Meigs, p. 486.

173. Gooch, A Practical Compendium of Midwifery, p. 195.

174. DeWees, A Compendious System of Midwifery, p. 275.

175. Croserio, p. 49-50.

176. Cooper, J.F. (M.D.). "Notes From an Obstetrical Record of Seventy Three Cases" Transactions of the American Institute of Homeopathy. Vol. XXXII, Sect. IV (1879) p. 463-465.

177. Guernsey, p. 261.

178. Guernsey, p. 264-273.

179. Buchanan, p. 169.

180. Ibid.

181. King, p. 526-532.

182. Buchanan, p. 171.

183. Beach, p. 169.

184. Hersey, p. 220-221.

185. Donegan, p. 115.

186. King, p. 553-555.

187. Guernsey, p. 274.

188. Rigby, p. 126.

189. Gooch, A Practical Compendium of Midwifery, p. 209.

190. Buchanan, p. 178.

191. King, p. 549-556.

192. Hersey, p. 136.

193. Hersey, p. 186.

194. Spratt, p. 46.

195. Guernsey, p. 281-282.

196. Playfair, W.S. (M.D.). A Treatise on the Science and Practice of Midwifery. Philadelphia: Henry C. Lea, 1876. p. 456.

197. DeWees, A Compendious System of Midwifery, p. 552.

198. Rigby, p. 126.

199. DeWees, A Compendious System of Midwifery, p. 550.

200. Bedford, p. 632.

201. Guernsey, p. 279-280.

202. Buchanan, p. 184-185.

203. King, p. 556-560.

204. Buchanan, p. 186.

205. Buchanan, p. 185.

206. DeWees, A Treatise on the Physical and Medical Treatment of Children, p. 46-47.

207. Buchanan, p. 125.

208. Howard, p. 70.

209. Meigs, p. 258.

210. Gooch, A Practical Compendium of Midwifery, p. 102.

211. Donegan, p. 91.

212. Donegan, p. 92.

213. Hersey, p. 226-227.

214. Howard, p. iv-v.

215. Mohr, Doctors and the Law: Medical Jurisprudence in Nineteenth-Century America, p. 112.

216. Mohr, Doctors and the Law: Medical Jurisprudence in Nineteenth-Century America, p. 112.

217. Mohr, Doctors and the Law: Medical Jurisprudence in Nineteenth-Century America, p. 113.

218. Coulter, Divided Legacy: Science and Ethics in American Medicine, 1800-1914, p. 95-96.

219. DeVille, p. 51.

220. DeVille, p. 53.

221. Mohr, Doctors and the Law: Medical Jurisprudence in Nineteenth-Century America, p. 113.

222. Kite, J. Alban (M.D.). "Death From Undelivered Placenta – Case of Malpractice." Boston Medical and Surgical Journal. Boston: Cupples, Upham, and Co., (November 5, 1885). p. 454.

223. Kite, p. 455.