

## ESOPHAGEAL STENOSIS FOLLOWING TYPHOID FEVER

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Cicatricial stenosis of the esophagus from healing of typhoid ulceration has become very rare in recent years, owing to the infrequency of typhoid infection. A total of twenty-seven cases has been collected from the literature, to which I wish to add one case.

The literature on the subject of typhoid ulceration of the esophagus begins with the classical description of Louis<sup>1</sup> in 1841, although this writer made no mention of stenosis developing from the condition. Packard<sup>2</sup> in 1898 reported the first case of stricture. This was followed by those of Mitchell<sup>3</sup> and Summers<sup>4</sup> in 1899. Pyle<sup>5</sup> in 1900 described a case of stenosis near the cardia which was successfully dilated by a rubber bag dilator distended with water. Reports by Tinker,<sup>6</sup> Dugan,<sup>7</sup> Turner<sup>8</sup> and Thompson<sup>9</sup> followed, bringing the total to thirteen cases reported up to and including 1904.

Vinson<sup>10</sup> in 1923 reviewed all previously reported cases and reported in detail thirteen seen at the Mayo Clinic between 1909 and the date of his paper. Of the twenty-six cases collected, only three patients were women. A later paper (1927) by the same author<sup>11</sup> states that the total number of typhoid strictures seen at the Mayo Clinic was four-

teen, thus bringing the total number of reported cases to twenty-seven.

#### CASE REPORT

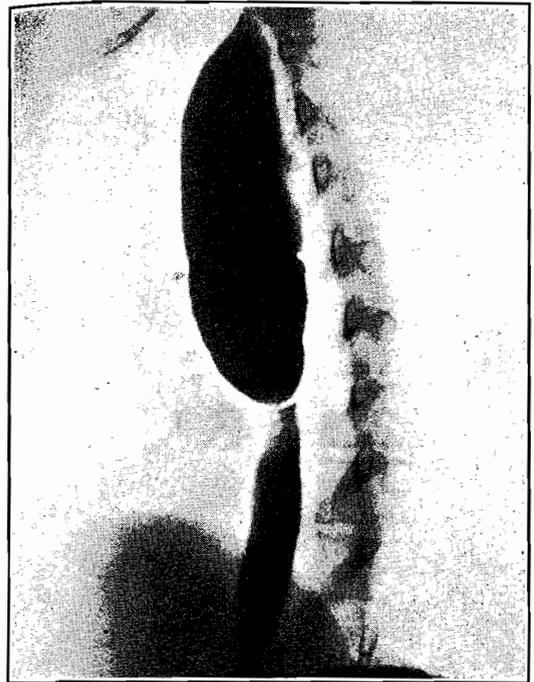
B. E. C., a man, aged 43, seen March 24, 1926, had had typhoid fever when eighteen years of age, being confined to bed for one hundred days. Difficulty in swallowing began while still in bed and had persisted with very little variation since. The trouble was first noticed on attempting to eat mush, and increased when more solid foods were taken. There was no pain. He had been living chiefly on soups, gravy and screened foods. No solids had been taken for many years. An average weight of 140 pounds had been maintained in spite of his trouble. In addition to typhoid fever at 18, there was a past history of measles at 22, and pneumonia at 30 years of age.

Physical examination was negative except for pyorrhea and stenosis of the esophagus. An esophageal bougie met with an obstruction  $14\frac{1}{2}$  inches from the incisor teeth.

Fluoroscopic examination revealed stenosis at the point indicated by the bougie (see illustration), and the patient was given a silk thread to swallow. Two days later, with the thread as a guide, the stricture was dilated with the Sippy olives passed over a piano wire. He was treated off and on during the next few weeks and the stricture was gradually overcome, so that ordinary foods were taken with ease. There has been no trouble in swallowing since that time, although he has been treated for colitis which appeared in the summer of 1928, following use of roughage. Return to a less irritating type of diet was followed by relief.

#### COMMENT

The above case is reported to add one case to those previously described. There have doubtless been many others not reported, for all so far published have occurred over a relatively short period of time, and during a period in which the disease causing stenosis has shown a most remarkable decrease in frequency. Additions to the literature on



Cicatricial stenosis of the esophagus following typhoid fever.

this subject must for obvious reasons become less frequent as the years pass.

#### BIBLIOGRAPHY

1. Louis: Recherches anatomiques, pathologiques et therapeutiques sur la fevre typhoide, 1841.
2. Packard, Frederick A.: Stricture of the Esophagus Following Typhoid Fever, Phila., M. J. 1: 7, 297, 1898.
3. Mitchell, Jas. F.: On the Oesophageal Complication of Typhoid Fever, Johns Hopkins Hosp. Reports. 8:295, 1899-1900.

4. Summers, J. E. Jr.: Stricture of the Esophagus as a Complication and Sequel of Typhoid Fever. Phila., M. J. 4:830, 1899.

5. Pyle, John S.: Stricture of the Esophagus Resulting from Typhoid Ulceration, with Report of a Case Introducing a New Method of Treating Esophageal Strictures. Phila., M. J. 5:303, 1900.

6. Tinker: Phila., M. J., March 3, 1900 (Summary in Thompson's paper).

7. Dugan: Stricture of Esophagus After Typhoid Fever. Med Times, 28:293, 1900.

8. Turner, M. L.: Stricture of the Esophagus After Typhoid Fever. J. Iowa State Med. Soc., 8:586, 1902.

9. Thompson, J. E.: Stricture of the Oesophagus Due to Typhoid Ulceration. Ann. Surg. 39:683, 1904.

10. Vinson, P. P.: Stricture of Esophagus Following Typhoid Fever. Med. Clin. N. A., 7:57, 1923.

11. Vinson, P. P.: Cicatricial (Benign) Stricture of the Esophagus; Tabulated Report of One Hundred Eighty-six Cases. Ann. Oto. Rhin. and Laryn., 36:40, 1927.

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