

INFECTIVE GRANULOMA OF STOMACH

PSEUDOCANCER

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SURGEONS and pathologists of experience have encountered a condition of the gastro-intestinal tract that usually is erroneously diagnosed as neoplasm, most frequently cancer, which has proven inflammatory in nature on operation or postmortem examination. Notwithstanding the clinical importance of this condition, it has not been sufficiently stressed in the literature, and knowledge of it by the individual man is gained through disappointing experience.

Mock,¹ in one of the most complete reviews of the subject, named this lesion "infective granuloma," discussing at length the reasons for this name. From the clinical standpoint, however, it would attract greater attention if called by the name Le Dentu applied to it in 1909—"pseudocancer."² This name is especially appropriate in considering the lesion in its reference to the stomach. Whatever the etiology of these lesions may be, one fact is well established: they are not specific granulomata.

These inflammatory masses are met with not only in the gastro-intestinal tract, but, perhaps even more often, in the mesoblastic organs. Such a lesion occurring in bone has, on several occasions, been diagnosed as malignant and later reported as a cure from surgery. However, it is only when the lesion is situated in the stomach that the preoperative diagnosis is invariably wrong and only microscopic study reveals the true nature of the condition.

Because of their intrinsic benignity, these lesions are far advanced before surgical assistance is engaged; and because the prognosis, based upon the clinical examination and the roentgen ray, appears so grave the ultimate discovery that the lesion is benign is dramatic.

Two cases coming under my observation demonstrated to my satisfaction a few important clinical and pathologic points that deserve attention. In both cases, the preoperative diagnosis was carcinoma of the stomach, and surgery was advised merely as a palliation. Even at the time of the operation, I failed to distinguish the condition from a carcinoma, although I was struck by the extensive matting together of the stomach with the adjoining omentum and intestinal loops. The regional lymph nodes were enlarged and simulated carcinomatous involvement. At first, the histologic picture was baffling, but after repeated study the true inflammatory nature of the lesion was seen.

CASE REPORTS

CASE I.—A man, 54 years old, an American, a carpenter by trade, was complaining of postprandial pain for a number of years; when the pain would let up he felt quite

comfortable and had no distress whatsoever. Gradually the pain became a constant symptom. Two months before the admission to the hospital, he commenced vomiting undigested food and three weeks ago he could not retain water. He lost 52 pounds during the last six months, present weight 104 pounds. He was very pale and thin; his hemoglobin was 32 (Dare). A test meal revealed a total acidity of 18, free hydrochloric of 6, combined of 14 and blood. Roentgen rays showed an enormous filling defect (Fig. 1). The diagnosis of carcinoma of the stomach suggested itself, and, following a proper preparation of the patient, a wide resection of the stomach was done after Billroth II method, with a Pólya modification. Eighteen cm. of the stomach had to be removed so as to reach a safe margin beyond the lesion. The stomach was tightly adherent to the surrounding structures and the operation proved to be quite formidable. There was no vomiting following the operation. On the sixth postoperative day he showed evidence of peritonitis and he died two days later. Although no postmortem examination was done I feel that a leak from the duodenal stump was responsible for the peritonitis.

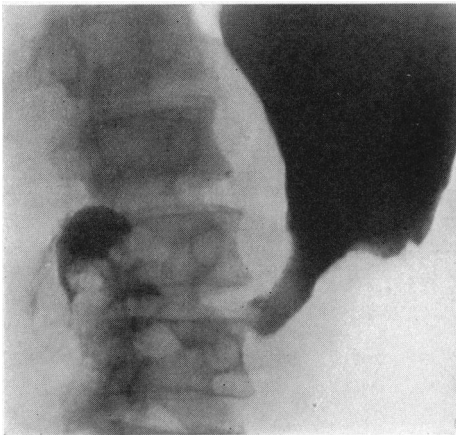


FIG. 1 (Case I).—Roentgen ray of stomach taken ten minutes after a barium meal. Showing the filling defect usually considered typical of carcinoma.

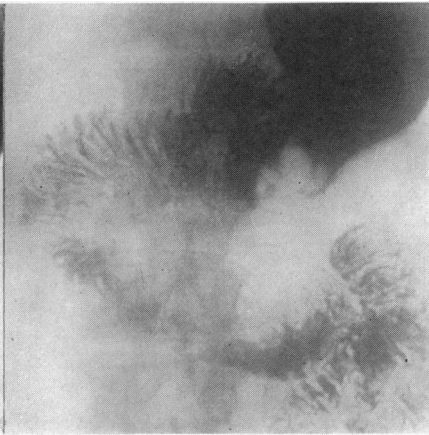


FIG. 2 (Case II).—Roentgen ray of stomach taken ten minutes after barium meal. Note the ragged-edged filling defect in the greater curvature near the pylorus.

CASE II.—A man, 43 years old, a Greek packing house employee, gave a history of upper abdominal distress related to meals for the last eight years. At first, the distress would come on in spells. Lately these became more frequent, and finally for two months before admission to the hospital he vomited undigested food repeatedly, and for the last week he even vomited water. A test meal disclosed a complete absence of free hydrochloric acid with a total acidity of 14, combined of 12, with a faint trace of lactic acid and two plus occult blood. Roentgen rays showed a definite filling defect (Fig. 2). The clinical diagnosis was carcinoma of the stomach, and a resection of the stomach was done May, 1931, after the Billroth II method. Because of dense adhesions of the stomach to the omentum, the duodenum and the pancreas, resection was tedious and difficult. During the first three months after operation he gained 28 pounds, resuming his usual occupation. The removed portion of the stomach measured 15 cm. in length; the resected part showed almost complete obstruction so that even a pencil could not be passed through the lumen.

The mucosa in the removed specimens of both cases appeared to be eroded in places. The specimens were extremely hard and leathery. The cut surface was white, glistening, with numerous yellowish spots; in places the cut edge felt cartilaginous. The lesion was not sharply circumscribed anywhere,

and faded out gradually into the normal stomach wall. Edema of the adjoining normal portion of the stomach made it difficult to be exact about the margin of the lesion. A close study of the advancing edge of the lesion sig-

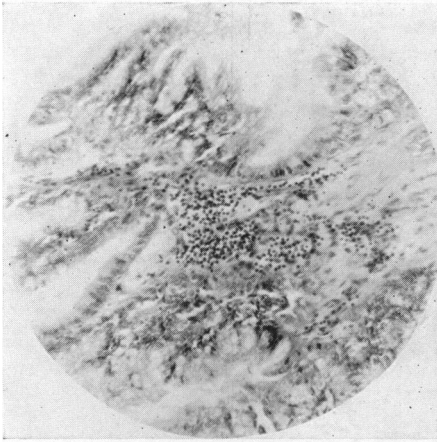


FIG. 3.—Section from tumor in Case II. Showing the early stage of involvement of the stomach. Note the round cell focal infiltration of the submucosa.

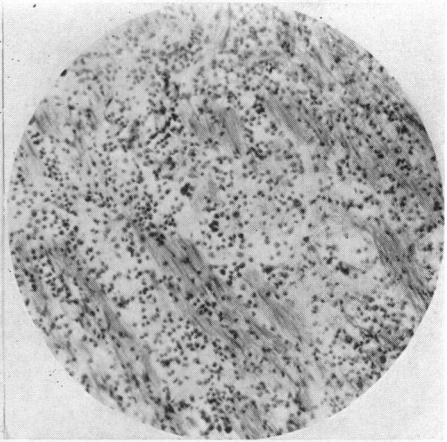


FIG. 4.—Section from same tumor as Fig. 3. Further stage of involvement of the wall of the stomach. The round cell infiltration is diffuse and organization has begun.

gests that a break in the mucosa precedes the inflammatory changes in the wall of the stomach.

Histologically, one may distinguish several stages in the development of

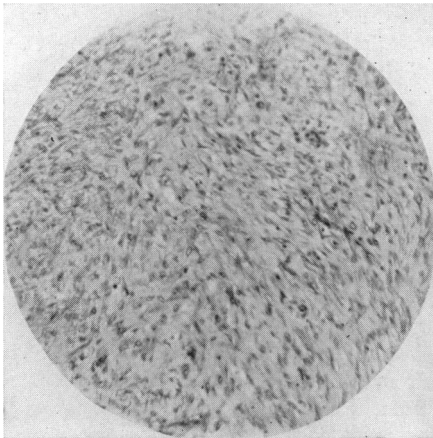


FIG. 5.—Section from same case as Fig. 3. The final stage of development of the tumor mass. Note the advanced organization of the resulting dense fibrous tissue.

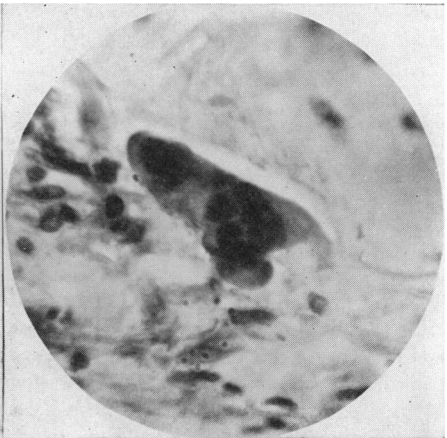


FIG. 6.—Section from same case as Fig. 3. Showing a large foreign body giant cell, as seen throughout the mature portion of the tumor mass.

the lesion. In the first stage (Fig. 3), we see an abundant, small cellular infiltration of the submucosa layer, which later leads to a diffuse infiltration of all the layers of the wall of the stomach (Fig. 4). An organization of this inflammatory exudate leads to the formation of a fibroblastic, dense, scar

tissue, that is responsible for the shrinkage of the wall of the stomach and for the narrowing of its lumen (Fig. 5). Dispersed among the numerous fibroblasts one sees foreign body giant cells (Fig. 6). When the inflammatory process reaches the serosa it causes a localized peritonitis that is responsible for the adhesion of the involved stomach to the adjoining organs. This peritoneal reaction is responsible for the postprandial pain.

Comment.—The diagnosis of gastric lesions by means of the barium meal and the roentgen ray is generally considered to be most reliable and trustworthy. My own embarrassment in the two cases presented here has taught me that one does well to be critical in the evaluation of the roentgen ray findings. This is said without any disrespect of roentgenology of the stomach, since even after the lesions are removed and studied in the pathologic laboratory, it takes a great deal of careful examination before the true diagnosis can be made.

Of course, it would be too much to expect that the clinician make the diagnosis of pseudocancer in these cases from the clinical examination alone. Looking back at these two cases, there are certain points which should have warned me against making the diagnosis of malignancy. The long duration of the illness with periods of complete freedom from symptoms, the absence of true cachexia in either of these patients, although a marked secondary anemia was present, and finally the postprandial pains which formed a prominent symptom in both of these cases, and which are seen in carcinoma of the stomach only after the tumor has reached the serosa, should have been given more consideration in the diagnosis than they actually received. And yet, when we are dealing with a middle aged man that has lost considerable weight because of repeated vomiting and who presents a palpable mass in the epigastrium, the suspicion of carcinoma of the stomach is great indeed. If in such a patient the roentgen ray shows a ragged edged filling defect and a delay in emptying time, one is naturally apt to accept these findings as evidence of malignancy. Despite this seemingly unimpeachable evidence of malignancy, the lesions here proved to be benign.

REFERENCES

- ¹ Mock, H. E. : Infective Granuloma. Surg., Gyn., and Obst., vol. 52, p. 672, 1931.
- ² Le Dentu : Faux cancers et tumeurs inflammatoires du ventre. Bull. de l'Acad. de méd., vol. 62, p. 289, Paris, 1909.