DEODENO-JEJUNAL TUBERCULOSIS

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Introduction:

Vomitting and Pain in Upper Abdomen of certain duration is common symptoms complex. This is usually due to Pyloric stenosis. But occasionally we come across Deodeno-Jejunal tuberculosis which I think is not uncommon if the disease entity is kept in mind in countries like ours where Tuberculosis is common. Tuberculosis of lung is found in almost 1% of the population. Tuberculosis of Abdomen and bone and Lymph nodes are also common. However Stomach and Duodenum are seldom the site of tuberculous lesion. Here are 3 Cases of Deodeno-Jejunal Tuberculosis who presented with symptoms simulating Pyloric Stenosis are presented.

CASE REPORTS

Case No. 1.

In-Patient No: 821. Mrs. S. K. A female of 21 years was admitted on 11.4.1968 with the diagnosis of Pyloric Stenosis. She had pain in the epigastric region for one year with the appearance of vomiting for six months which occurred after food and was very foul smelling. Her general condition was fair with scaphoid abdomen which felt doughy with moderately tender epigastrium. There was no palpable mass, liver and spleen was not palpable. Visible peristalsis moving from left to right was noted after drinking water, there was presence of succussion splash. CVS and lung were normal Barium Study revealed dilated duodenum suggesting obstruction at the Duodenal-Jejunal Junction. She improved on antacid therapy with intravenous fluid supplement given to correct the dehydration while she was in the hospital. She was advised laparotomy but went home on 24.4.1968. She was readmitted on 21.5.1968 in low and restless state with the history of fever and vomiting for two weeks. She was irri-

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table. Temperature 99.8.F pulse 90 per minute regular, B. P. 100/70 mm. Hg. with white coated tongue. She had both neck rigidity and positive Kernig's sign; with crepts scattered all over the chest. Immediate lumbar puncture report showed normal C.S.F. She was however put on antituberculosis therapy (Streptomycine and I. N. H.) with adequate hydration. She made very good recovery. She become afebrile on 7th day. Her preoperative chest X-Ray was normal. She was operated upon on 7.6.1968. Deodeno-Jejunal Junction was found to be stenosed with lots of fibrosis around. There was glandular enlargement the glands surrounding areas was calcified. But other part of intestine and viscera appeared normal. Gland piopsy was taken. Retrocolic-Gastrojejunostomy was done. The histopathology showed that the glands were tubercular in nature. The patient made uneventful recovery on antituberculosis therapy. On follow up she remained very well and gained weight markedly.

Case No. 1.

Case No. 2.

Case No. 2:

In-patient No. 7034 Mrs. R. T. A. female of 32 years admitted on 8.2.1973 with history of pain abdomen mostly upper and vomiting after taking food for three months. Pain abdomen after meal for one year. Vomitus contain semidigested food. Her general condition was fair, dehydration was marked and she was anaemic. Abdominal examination showed visible peristalsis. Peristalsis was from left to right; and suction splash was present. Chest was clinically normal. No lymphadenopathy. Intravenous infusion was given to combat dehydra-

tion. A provisional diagnosis of pyloric-stenosis was made. Her further investigation showed W.B.C. 6850, Neutrophil 70%, Lymphocyte 26%, Eosinophil 2%, Monocyte 2% Hb. 12gm, per 100 ml., Stool and urine normal, Barium meal study of stomach and deodenum showed dilatation of stomach and deodenum, X-Ray chest shows enlarged hilar shadow. Laparotomy was done and there was constriction at the deodeno-jejunal junction and lymphnodes were enlarged around the pylorus. Mesentire lymphnodes were enlarged which on aspiration brought out caseous material. Stenosis of Deodeno-Jejunal junction was diagnosed and posterior Gastrojejunostomy was done. While opening jejunum multiple milliry like spots were seen in jejunum. Histopathology of lymphnodes around jejunum showed tubercular nature. Jejunal histopathology was reported normal. After the operation the patient was put on antitubercular treatment. Recovery was uneventful vomiting stopped. On follow up she has gained weight.

Case No. 3 :

In-patient No. 6895 Mr. K. P. A male of 28 years was admitted on 2.2. 1973 with the history of vomiting for one and half months. Vomiting was frequent. Vomitus contained semi-digested food. Vomiting happened usually after six hours of feed. Pain abdomen in the epigastrium was also for nearly two months. Constipations has been since the vomiting appeared. His condition was poor and dehydration was marked and was cachectic and was anemic. Abdomen was scaphoid, liver and spleen not palpable, no lymphadenopathy visible peristalsis was seen after drinking water. A provisional diagnosis of pyloric-stenosis was made. After combating dehydration and keeping him on supportive therapy to improve his general condition, a barium study was done which showed pyloric stenosis. Laboratory investigation. WBC 7950 Neutrophil 67%, Lymphocyte 33%, Eosinophil 0% E. S. R. 98 mm Temperature 98° B.P. 200/60 mm of Hg. Hb. 11 gm per 100 ml. After 2 pints of transfusion he was operated on 25.3.73 for pyloric-stenosis but opening the abdomen no ulcer and no pyloric stenosis were seen. And Ileocecal mass was seen with threatened obstruction and enlarged lymphnodes were seen. While tracing up there was a big lymphnodes mass pressing the deodeno-jejunal junction and the lumen at the deodeno-jejunal junction was narrowed right hemi-Ilio-colectomy, and ilium and transverse colon end to end anastomosis, and posterior Gastro-jejunostomy was done. Lymphnodes was sent for biopsy. Histopathology showed tubercular in nature. After operation he was put on anti-tubercular treatment (Streptomycine and I.N.H). Post operative period was uneventful, no nausea vomiting. He was discharged on fifteenth day of operation to continue anti-tubercular treatment and to come for check-up regularly.

Discussion :

Tuberculosis of the upper gastrointestinal tract namely stomach and duodenum is rare. The possible route of infection are i) direct infection through the mucosa, ii) hematogenous spread, iii) lymphatic spread, iv) spread from the serosa by continuity from adjacent structures specially lymph nodes.

Broders (1917) reviewed all the published cases of gastric tuberculosis and found only

306 cases. Of these he rejected 80 cases as unlikely and in only 49 of the remainder had tubercular bacilli been demonstrated. Clagett and Walter (1938) collected 368 cases of which 30 had concomitant gastric neoplasm. Tanneretal (1956) described 34 cases of gastric tuberculosis associated with cancer 10% of gastric tuberculosis occurs in association with Carcinoma. Seven gastric lesions in 20,000 at Mayo clinic proved to be tuberculosis: Aird (1957) Bently et al (1967) while reporting his two cases of tuberculosis of stomach collected 42 cases between 1957 and 1964 of which all were Russian. The reported incidence of the disease in autopsy is from 0.36 to 2.3%. Primary tuberculosis of stomach is extremely rare. Broders maintained that no case had been absolutely proved to have primary in the stomach. Good (1931) thinks it does not exist. As a matter of fact, in Gastric tuberculosis Clagett and Walter found pulmonary tuberculosis 94% to 100%, intestinal lesion in 69-91.5% and that of liver and lymph nodes in 74% and 68.1% respectively. Chaffins states that about 50% of Gastric tuberculosis have simultaneous involvement other organs (Bernard et al 1956).

Tuberculosis of adodenal area is rarer than that of stomach even patient of with pulmonary and intestinal tuberculosis. It is thirty times rarer in the duodenum than in the intestine (Aird 1957). According to Richard and Cherrier about 10% of Gastric tuberculosis has duodenal tuberculosis as well (Bernard et al 1956); Baikian et al 1967). Only 12 proved cases of tuberculosis limited to duodenum and regional lymph nodes have been reported till 1946 Bernard et al, Buskstein (1953) cited a case of hypertrophic tuberculosis of 1st portion of duodenum; Wig et al (1961) reported 49 cases of hypertrophic tuberculosis 67 case of Abdominal tuberculosis with duodenal involvement in 7 cases (Ferreira et al 1966). The later described a case of ulcerative tuberculosis in the 3rd and 4th portion duodenum Bulkein et al quoted Fieldmann to state that duodenal tuberculosis occurred only in 9.5% of cases of tuberculosis cases autopsied. Brown and Simpson in 184 autopsied, cases of pulmonary tuberculosis with intestinal lesion found duodenal tuberculosis in 6% and that of large intestine in 19% and remaining 75% being restricted to Ileum and Caecum; Granet (1935) came across duodenal ulceration in 4 out of 29 autopsy of tubercular enteritis (Ferrier et al). Mathews et al (1932) mentioned 105 cases of generalised intestinal tuberculosis and reported 18 cases of localised cases of generalised intestinal tuberculosis and reported 18 cases of localised duodenal tuberculosis with only 6 being proved histologically.

Pathological types of duodenal tuberculosis are one. i) Ulcerative commonest ii) Hypertrophic iii) Infiltrative and iv) Enteroperitnial. There is usually extensive lymph nodes involvement in the tuberculosis of duodenum. As for clinical features are concerned, duodenal tuberculosis may be symptomless or with symptoms of peptic ulcer and obstruction. In 50% there is a palpable mass and in about 50% there is evidence of tuberculosis elsewhere (Balkein et al). Radiology has little to offer as an aid to diagnosis. But Ackerman (1940) believes that simultaneous involvement of stomach and duodenum increases the possibilities of tuberculosis etiology as compared to carcinoma which stops at pyloric region. The possibility of gastric or duodenum tuberculosis should be borne in mind when tubercular lesion is found in association with an obvious lesion elsewhere.

Antitubercular therapy is so effective in exudative and inflammatory lesion that resection if required only for hypertrophic irreversibly destroyed tissue. In spite of advocacy of surgical treatment in the literature for the tuberculous linitum plastica and generalised hypertrophic tuberculous of stomach. It comes a high operative mortality (Edidin et al 1956).

In our cases drainage operation had to be performed for the tight stricture lesion and antitubercular therapy except in case 3 where right ilio-collection was also done.

Conclusion :

Three cases of duodeno-jejunal tuberculosis which could be diagnosed on laparotomy only are reported.

The aim of this paper is to suggest that in country where tuberculosis is common, a young patient with the history of pain upper abdomen and vomiting should be investigated for the Stenosis due to tuberculosis of the Duodeno-Jejunal junction.

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