

rial. Loops of ileum were gummed up, angulated and kinked as a result of adhesions to the enlarged inflamed mesenteric lymph nodes (Fig. 2). Although the proximal gut was distended the gross appearance of the colon and rest of the small gut was normal. The loops of gut were freed of adhesions and resection was not needed. Multiple biopsies of mesenteric lymph nodes were taken and the affected part of omentum was excised for histology.

Fig. 1.



Fig. 1: Thickened omentum adherent to the pelvic viscera & terminal ileum.

Fig. 2.



Fig. 2: Kinked loops of ileum adherent to the Mesenteric Lymph nodes or it is to mesentery alone?

Post-operatively, the patient made an uneventful recovery. Due to the per-operative impression of abdominal tuberculosis, she was started on anti-tuberculous therapy (A.T.T.).

The histological report came out to be a surprise. It reported fragments of fibro-fatty tissue having necrotic areas and dense infiltration of polymorphs and histiocytic aggregations having Michaelis-Gutmann bodies. The accompanying fatty tissue showed lymphocytic infiltration. No granuloma or malignancy was seen in the lymph nodes. Features were suggestive of malakoplakia.

The patient stayed in the ward till her stitches were removed. On receiving the histology report, her A.T.T was stopped. She was put on a first generation cephalosporin for one week only. The patient came for follow-up irregularly. She was

last seen in November 1993 (Fig. 3). She had gained weight and her Hb% was within normal range. Apart from occasional pain in abdomen she had no other complaints. She was not taking any medication.

Fig. 3.



Fig. 3: Remarkable improvement in the patient 5 months after operation without any medication.

Discussion:

Malakoplakia is a rare disease, a diagnostic dilemma and almost always diagnosed histopathologically. Symptoms mimic those of various diseases depending upon the organ of involvement. For example, when it involves colon, the clinical picture mimics that of chronic inflammatory bowel disease⁽⁴⁾. It may co-exist with other diseases and diagnosed incidently at biopsy or necropsy⁽⁷⁾.

Not much is known about the etiology of the disease but since it often co-exists in patients with malignancies, chronic debilitating illnesses⁽⁶⁾ and AIDS⁽⁸⁾. It is suggested that immuno suppression and malnutrition may be the predisposing factors⁽⁹⁾. Others consider this condition to be of infectious origin specifically as a reaction to *E. coli*⁽¹⁰⁾ or any mycobacterial infections⁽¹¹⁾. Although no definitive treatment is known, if the infectious nature is suspected, treatment with antibiotics seems rationale. Ciprofloxacin⁽¹²⁾ and cotrimaxazole plus ascorbic acid⁽¹³⁾ have been tried with some success. No long-term followup is available yet to give us idea about the prognosis of the disease.

Our patient was also a diagnostic dilemma for us. The clinical and per-operative picture mimicked tuberculosis of abdomen. The diagnosis of Malakoplakia was revealed on histology. Her A.T.T. was stopped and she was given antibiotics

MALAKOPLAKIA OF OMENTUM AND MESENTERY SIMULATING TUBERCULOSIS OF ABDOMEN: A DIAGNOSTIC DILEMMA

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Abstract

Malakoplakia is a rare granulomatous disease of unknown aetiology. It can involve any organ and can occur in any age group but is rare in children. Case of a 10 year old girl is reported whose clinical picture, peroperative diagnosis and initial management was that of tuberculous abdomen. Histological surprise came out to be malakoplakia of greater omentum and mesentery. Subsequently she improved without any medication.

Key Words: Melakoplakia, Omentum, Mesentery and Tuberculosis abdomen.

Introduction

Malakoplakia is a Greek term for "Soft Plaques" that are yellowish in color and have surrounding inflammatory reaction. This condition first recognised in urinary tract has now been described in almost every organ and soft tissue site. It commonly affects the urinary tract⁽¹⁾ followed by colon⁽²⁾, lungs, bones, prostate, testis, skin, pancreas etc. Although it has been described in almost all the age groups it is more common in elderly with fewer cases in children⁽³⁾. Colonic malakoplakia in paediatric age group has recently been reported in Pakistan⁽⁴⁾. It affects male and female with equal frequency.

Malakoplakia is very difficult to suspect clinically. It is almost always a pathological diagnosis. The lesions typically comprise of large foamy macrophages having abundant PAS positive cytoplasmic inclusions which are due to ineffective bacteriolysis by these functionally de-

fective macrophages. When bacterial debris and disintegrating phagosomes get mineralised by calcium phosphate, they form whorl-like bodies called Michaelis-Gutmann bodies, pathognomic of malakoplakia. Others consider these MG bodies to be iron containing calculospherules⁽⁵⁾. The defective phagocytes containing MG bodies are termed as Von-Hanseman's Cells⁽⁵⁾.

Case Report

In early July 1993, a 10 years old girl from N.W.F.P. presented in emergency with diffuse abdominal pain, distention, constipation followed by loose motions, low-grade fever, loss of appetite and weight loss for the last 4 weeks. The child was plae, weak, grossly underweight and looked unwell. The abdomen was generally tender and moderately distended. A vague mass was palpable in the lower abdomen which was not bimanually palpable on P/R.

She was admitted with the provisional diagnosis of subacute intestinal obstruction secondary to? Tuberculous abdomen. She was initially managed conservatively and investigated. Her Hb was 7 gm%, TLC 7,800 cells/cb mm with DLC of 63% polymorphs and 30% lymphocytes. Abdominal X-rays showed disended loops of small bowel with a few air fluid levels. Abdominal ultrasound did not pick any definite mass. When the patient did not settle on conservative management, she was prepared for elective exploratory laparotomy 4 days after her admission.

Per-operatively distended loops of small gut were found. Omentum was thickened and adherent to the pelvic viscera and terminal ileum, (Fig. 1) forming a mass with whitish chessy material in between which was considered as caseous mate-

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for 1 week to cover her post-operative period. As we had no knowledge of the treatment of this disease before the current medical literature became available to us after the patient had left, she was not started on any other medication. When she first reported to the outpatients after a month or so, she was improving rapidly. When last seen 5 months after the operation in November 1993, she had improved remarkably without any medication.

The first documented case of malakoplakia of omentum and endometrium was reported from Thailand⁽¹⁴⁾. Malakoplakia of the omentum and mesentery has been reported probably for the first time in Pakistan. Malakoplakia though a rare disease should be considered in the differential diagnosis of tuberculosis of abdomen which is not an uncommon condition in Pakistan.

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