

# Omental Dermoid: A Rare Cause Of Intestinal Obstruction

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## Abstract

Dermoid cyst of the omentum is a very rare condition. Mostly it is asymptomatic but it may present in the form of vague pain, abdominal mass or intestinal obstruction. We report a case of a 60-year-old female, who presented with acute intestinal obstruction. On exploration, a dermoid cyst was found in the omentum. A band was arising from it and encircling the terminal ileum causing small bowel obstruction. Partial omentectomy including the dermoid cyst was done. Histopathology report showed a benign mature teratoma. Postoperative recovery was uneventful.

## INTRODUCTION

Omental cysts are rare a condition. They are either true cysts or pseudocysts. Various true omental cysts are cystic lymphangioma, cystic mesothelioma and dermoid cysts. All these cysts are benign and lined by endothelium, cuboidal mesothelium and squamous epithelium, respectively.<sup>1</sup> These cysts are seldom diagnosed pre-operatively as they are mostly asymptomatic.

## CASE REPORT

A 60-year-old female presented to the casualty with complaints of abdominal pain, distention of the abdomen, vomiting and constipation for 7 days. On examination, the patient was mildly dehydrated with a pulse rate of 90/min, a respiratory rate of 22/min, a blood pressure of 110/70 mmHg and normal temperature. The abdomen was distended but not tense or tender, bowel loops were visible without any lump felt. Bowel sounds were increased and digital rectal examination was normal. Hematological and biochemical investigations were within normal limits. X-ray of the abdomen showed dilated bowel loops and multiple air-fluid levels without any free gas under the diaphragm.

Due to the clinical impression of acute intestinal obstruction laparotomy was planned. On exploration through midline incision, dilated small bowel loops were found up to the terminal ileum with collapsed large bowel. A mass of about 10x10cms was present in the omentum which adhered to the anterior abdominal wall on the right side. A band was arising from this mass and encircling the terminal ileum causing small bowel obstruction. The band was divided and the obstruction was relieved. Partial omentectomy including the

mass was carried out. Both ovaries were normal and no other intra-abdominal pathology was detected.

On cut section, earthy pultaceous material was present along with a solid component and hairs. Histopathological examination showed a thick and thin walled cyst containing few hair follicles and degenerative material. Post-operatively, the patient recovered and was discharged on the 8<sup>th</sup> postoperative day.

## Figure 1

Figure 1: Omental Dermoid



## DISCUSSION

Omental cysts are a rare entity, accounting for ~25% of all abdominal cysts.<sup>2</sup> Most of the omental cysts are of lymphatic or mesothelial origin, while pseudocysts of the omentum may result from fat necrosis or hematoma. Another rarer cyst of the omentum is the dermoid cyst, which is lined by squamous epithelium and may contain hair, teeth and

sebaceous material. Meckel described the first case of an omental dermoid in 1815.<sup>3</sup>

The exact etiopathogenesis of dermoid cysts is not clear but the proposed mechanisms are either primitive germ cell entrapment into the omentum during embryological development as they migrate from the yolk sac to the urogenital ridge,<sup>4</sup> or these cysts actually originate in the ovary but later get detached and implanted in the omentum.<sup>5</sup>

Many omental cysts are small and asymptomatic and may only be discovered incidentally at laparotomy or autopsy. Large cysts may present with vague pain, abdominal mass or intestinal obstruction.<sup>6</sup> In our case, the patient presented with features of acute intestinal obstruction because of a band arising from the dermoid and encircling the terminal ileum.

Radiological investigations may be helpful but the final diagnosis is only made after laparotomy and histopathological examination. Treatment is excision of the

cyst. Prognosis is good and recurrence is rare.<sup>6</sup>

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