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AN UNUSUAL CASE OF MAYDL'S HERNIA

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ABSTRACT

MAYDL'S HERNIA (hernia-in-W) is one of the rare presentations of strangulated inguinal hernias in adults. Its incidence is reported to be between 0.6-1.92 % of all strangulated hernias [1-3]. Two or more loops of bowel lie in the hernia sac but it is the intervening loop, within the abdomen, that is most severely affected, hence the term hernia-in-W. This case report presents one such case of a Maydl's hernia. The Intraoperative finding of a strangulated intra-abdominal loop of jejunum with normal jejunum loops in the hernia sac eventually led to the diagnosis of Maydl's hernia. Jejunum as a content of Maydl's hernia has not been reported in literature available.

Keywords: Maydl's hernia, strangulated hernia

INTRODUCTION

Maydl's Hernia (hernia-in-W) is one of the rare presentations of strangulated inguinal hernias in adults. Two or more loops of bowel lie in the hernia sac but it is the intervening loop, within the abdomen, that is most severely affected, hence the term hernia-in-W. There are three types of Maydl's hernia, depending on the content of the hernia sac. Jejunum as a content of Maydl's hernia has never been reported in literature reviewed.

CASE REPORT

A 60 year old fisherman from Pondicherry, India, a known hypertensive presented to our emergency room with history of irreducibility for 4 hours, of a long standing right inguinal hernia of 10 years. There was mild pain over the swelling but no associated abdominal pain or vomiting. On examination the patient was well oriented, had a pulse rate of 76/minute, blood pressure was 180/100 mm Hg and was well hydrated. Local examination revealed a large (20*10 cm), ovoid shaped, right sided inguino-scrotal swelling which was irreducible, with

mild to moderate tenderness, no local rise of temperature, no redness of the skin and absent cough impulse (Figure 1). Bowel sounds were audible over the swelling. The abdomen was soft, non-tender and not distended. Bowel sounds were audible over the abdomen. A diagnosis of irreducible right inguinal hernia was made and the patient was posted for emergency surgery.

Under epidural and spinal anesthesia, a 15 cm inguino-scrotal skin incision (hockey-stick shape) was made. As the inguinal canal was opened the large, thick walled hernia sac was visualized. The sac was opened and some serous fluid was suctioned out. At exploration, two loops of normal looking jejunum were present in the sac. After the obstruction was relieved, traction on the loops revealed, a 10 cm long gangrenous loop of jejunum in between the normal loops (Figure 2 & 3). The gangrenous segment was resected and end to end anastomosis was done. The resected segment appeared to be jejunum (Figure 4). A modified Bassini's hernia repair was done with 1-0 prolene.

The patient had an uneventful post-operative recovery period. The histopathology report confirmed that the resected segment was *jejunum*.

DISCUSSION

Karel Maydl, a Bohemian surgeon in 1895, first described this hernia. Three types of Maydl's hernia have been described based on their contents as Type 1) only small bowel; Type 2) both small and large bowel and, Type 3) only large bowel [1]. *This was a type 1 Maydl's as it contained only jejunum.*

The reported incidence of Maydl's hernia is 0.6 to 1.92% of all strangulated hernias [2-4]. It is extremely rare in Europe and North America. Frankau [2] found only four, in his series of 1487 cases. But Bayley [5] reported five among 26 in Ghana and Cole [3], three out of 157 in Nigeria. Most of the reported cases are from Africa and it could be attributed to high incidence of untreated hernias [6].

Maydl's hernia occurs more commonly on the right side and in men. It is most likely to contain terminal ileum or caecum [6]. It may occasionally contain transverse colon, hepatic flexure or sigmoid colon (Table 1). Jejunum as content has not been reported in the literature available.

The occurrence of Maydl's hernia depends on a multitude of factors. Long standing hernias may predispose to more bowels being dragged into

the sac. Adhesions developing over a period of time may predispose to a 'W' configuration preventing one segment to herniate while permitting the more mobile loops to herniate around them [7].

The significance of this type of hernia is the risk of the strangulated middle segment going unnoticed at surgery due to a false judgment made by the presence of two viable loops in the hernia sac. This could be potentially fatal. The clue that may point to the diagnosis of *Maydl's hernia* is the presence of blood stained or foul smelling fluid present in the sac disproportionate to the condition of bowel. The possibility of a second *Maydl's* loop should be kept in mind and the part of bowel proximal to the neck of the hernia must always be examined [6].

Maydl's hernia should be suspected in patients with large incarcerated hernias and in patients with evidence of intra-abdominal strangulation or peritonitis (7). But In our case the patient did not have any signs of obstruction or strangulation and the irreducibility was for less than 12 hours. There was only mild to moderate tenderness at the root of the scrotum, no signs of peritonitis were present. The strangulated loop was confirmed to be jejunum. Hence the possibility of Maydl's hernia should always be kept in mind when patients present with large, long standing inguinal hernias with acute onset irreducibility, even when signs of strangulation are absent.

Table 1. Reported cases of Maydl's hernia

Sl. No.	Author	Year	No. of Cases	Type 1 (SB)	Type 2 (SB+LB)	Type 3 (LB)	Bowel Resection needed
1	Frankau ^[2]	1931	4	nc	nc	nc	1
2	Paul ^[8]	1944	1	1			1
3	Cole ^[3]	1964	3	3			3
4	Philips ^[4]	1967	2	nc	nc	nc	nc
5	Bayley ^[5]	1970	5	2	3		1
6	Moss et al ^[9]	1976	1			1	1
7	Ganesaratnam M ^[1]	1985	7	1	5	1	2
8	Narang et al ^[10]	1987	1		1		1
9	Sanoop koshy Z ^[7]	2010	2		2		1
	TOTAL		26				

NC – not commented.

LIST OF ABBREVIATIONS

mm: millimeters.

hg: mercury.

cm: centimeters.

SB: Small bowel.

LB: Large bowel.

Prolene: Polypropylene

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Figure1: Large (20*10 cm) irreducible right inguinal hernia

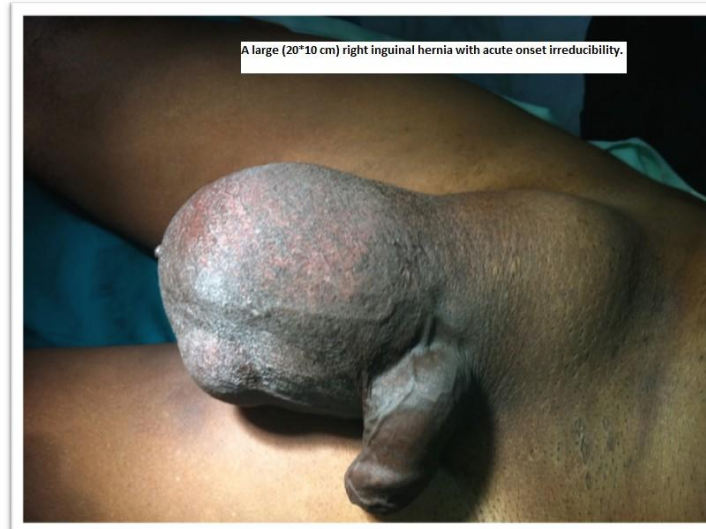


Figure 2: W-shaped loops of normal looking jejunum in the hernia sac.



Figure 3: Strangulated jejunum {apex of W} present intra-abdominally.

