

CASE REPORT

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Retroperitoneal Abscess Simulating Abdominal Mass in a Child

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ABSTRACT

Retroperitoneal abscess may simulate other abdominal masses. A 2-year-old girl presented with abdominal pain and lump in right iliac fossa for the last one week. Investigations revealed a mass extending from pelvis up to right sub-hepatic region. Diagnostic laparoscopy revealed an unremarkable peritoneal cavity, except that ascending colon up to hepatic flexure was elevated suggestive of retroperitoneal mass. A small flank incision was then made and abscess was drained.

Key words: Abdominal lump; Abscess; Retroperitoneal

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INTRODUCTION

Primary retroperitoneal abscess is rare in children.[1] Its presentation is insidious with flank or groin pain and fever. Rarely, It may simulate an abdominal mass.[2-5] We report a case of primary retroperitoneal abscess presenting as an abdominal mass in a child.

CASE REPORT

A 2-year-old-female child, weighing 9 Kg, presented with right iliac fossa pain with abdominal lump for a week. It was associated with fever and loss of appetite. On examination, the child was pale, and febrile (99.50F). Abdominal examination revealed a 10 x 7 cm smooth, mildly tender, right flank mass extending from the right subcostal region to the pelvis, crossing the midline. Laboratory values revealed haemoglobin 7.6 gm% with raised total leukocyte count-17,100/mm³ (Neutrophils 68%, Lymphocytes 26%). Serum calcium was low (7.6 mg/dl), serum proteins-5.5 gm/dl, and serum albumin-3.1 gm/dl. Chest radiograph was normal; spine X-ray revealed mild scoliosis. Ultrasonography revealed a non-

vascular, mixed echogenic cystic mass containing variable contents like fluid, fat and solid components extending from the right sub-hepatic region to the pelvis. Contrast enhanced CT (CECT) revealed 9.5 x 6.4 x 8.6 cm mass (Fig.1A) arising from the pelvis extending up to right lumbar region and causing upward and medial displacement of right kidney. It has both cystic and solid components.

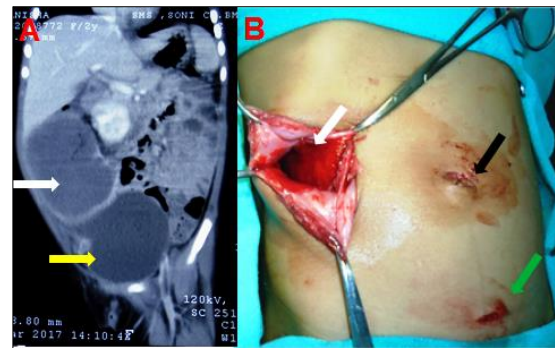


Figure 1: CECT abdomen showing right flank mass (white arrow) with pelvic component (yellow arrow) with few hypodense areas; (B) showing 5mm umbilical (black arrow) and 5mm working (green arrow) port sites used for diagnostic laparoscopy and a scar mark on the flank.

Diagnostic laparoscopy was performed. Ascending colon up to hepatic flexure was found elevated because of the mass. A small stab incision was made over the most prominent part of the mass in the right flank to introduce the trocar. As the stab incision was made, pus gushed out. A septated retroperitoneal foul smelling frank pus with flakes and debris, was drained. Cavity was irrigated with normal saline. The incision was then enlarged for removing the inspissated debris (Fig.1 B). Pus was sent for Gram and AFB staining, culture sensitivity along with biopsy of the tissue taken from the cavity. Drain placement and closure was done.

Microscopy of the purulent material revealed numerous leucocytes and scanty Gram-positive cocci. Pus culture was sterile; AFB culture was negative and scrapping biopsy revealed necrotic tissue with chronic inflammatory infiltration. Patient is on regular follow-up.

DISCUSSION

Retroperitoneal abscess is frequently seen in 3rd to 6th decade of life with male preponderance.[1,6] Primary infection (more common type) is due to hematogenous spread from an occult source usually located in the muscles and spine.[6,7] In index case source could not be found.

The presentation of retroperitoneal abscess is non-specific, insidious with pain and fever.[4] Pain may be located in the flank, groin or in the back. Other symptoms are vague abdominal pain, nausea, and malaise, chills, tachycardia and weight loss. Limp may be present in older children and adults.[6] There is usually an absence of peritoneal signs leading to delay in diagnosis. In our case, retroperitoneal pus got accumulated in the extra-peritoneal space of the abdominal wall and tracked down along

the psoas muscle to the extra-peritoneal space of the pelvic cavity, thus simulating an abdominal mass extending from the right sub-hepatic region to the pelvis.[2,5] CT scan is essential to demonstrate the anatomical details, suggest diagnosis and rule out underlying pathology. Management involves drainage of the retroperitoneal abscess and treatment of the underlying cause along with broad spectrum antibiotics. Open drainage is recommended for large abscess cavity as seen in our case.[3].

Consent: Author has submitted signed consent form from legal guardians of the patient for use of clinical material in this manuscript. The Consent form is available with Editorial office.

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