

CASE REPORT

# Acute presentation of Urachal remnant

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## INTRODUCTION

Acute lower abdominal pathologies form a significant etiological proportion of paediatric emergency hospital visits. Specifically, acute appendicitis, mesenteric lymphadenitis and complicated Meckel's diverticulum are common lower abdominal pathologies leading to acute presentation.

## CASE PRESENTATION

An eleven-month-old, previously healthy male child was admitted to the hospital with a history of fever for two weeks duration. On examination abdominal distention was noted with tenderness in the suprapubic region. He had laboratory workup for pyrexia of unknown origin.

## RADIOLOGICAL WORKUP

Ultrasonography (Figure 1) showed a heterogeneous, multilocular collection measuring about 90 cc lying anterior to a partially distended urinary bladder. Further, a CT scan study (Figure 2) was done for detailed evaluation. A multiloculated cystic area with peripheral enhancement of the wall of the loculi could be noted lying adjacent to the anterior abdominal wall and antero-superior to the urinary bladder, extending towards the umbilicus. The bladder was seen indented by the collection from the superior aspect. No free fluid was noted within the abdomen. Features were suggestive of a multiloculated abscess lying antero superior to the urinary bladder, extending towards the umbilicus. Likely possibility of infected urachal cyst was considered among other differential diagnoses.

## TREATMENT

The abscess was surgically drained. Post-operative course was uneventful.

## DISCUSSION

Postnatally, urachus is identifiable as a fibrous band extending between the dome of the bladder and umbilicus as the median umbilical ligament. However, if it persists after birth it can present in various manners like



Figure 1. Ultrasonography of sagittal sections showing heterogeneous collection immediately deeper to the anterior abdominal wall, indenting the urinary bladder superiorly.



Figure 2. Axial post contrast CT scan sections showing the multiloculated collection.

a patent urachus, urachal sinus, vesico urachal diverticulum or a urachal cyst.<sup>1-4</sup>

Many acquired pathologies secondarily affect urachal remnants, infection being the commonest complication. Benign neoplasms like adenoma, fibroma, fibro adenoma, fibromyoma and hamartomas, or malignant neoplasms like carcinoma can occur.

A patent urachal diverticulum is more prone for infection. However lymphatic or hematogenous routes are also

suspected. Clinically it may be confused with inflammatory bowel pathology.<sup>2,5,6</sup> Radiologically it can mimic a mass lesion in view of the complex appearance. Agastein EH et al. described a case of peritonitis due to spontaneous intraperitoneal perforation of an infected cyst.<sup>7</sup> Surgically a complete resection is aimed to avoid any further complications like recurrent infection or malignant transformation.

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