Case Report

Acute abdomen in children: Never miss torsion of ovary in a girl child.

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ABSTRACT

Ovarian torsion represents an important differential diagnosis for acute abdomen in children. Prompt diagnosis and early treatment saves adnexa from further damage. Clinical signs of appendicitis overlap torsion of ovary. Reporting an interesting case of 10 year girl child with acute abdomen diagnosed with torsion of right ovary, which was surgically managed with no further complications.

INTRODUCTION

Torsion of ovary constitutes approximately 2.7% of all cases of pain abdomen in children [1,2]. Early diagnosis of torsion of ovary and management in the form of detorsion of ovary prevents further damage to adnexa. Surgery is lifesaving in children especially girl child. Other conditions of acute abdomen overlap torsion of ovary, so early diagnosis of this condition is challenging for paediatricians.

Fallopian tubes normal movements cause ovarian rotation with its blood vessels leading to vascular compromise, infarction, necrosis and adnexal damage. Complications of torsion of ovary are high in children because it is rare and clinical signs and symptoms are non-specific and overlap with other causes of acute abdomen [2].

Torsion of ovary happens in ovaries with masses, cysts and tumors. Right sided torsion of ovary is common than left side because of restricted movement of left ovary due to presence of sigmoid colon [3].

We are reporting an interesting case in a ten year girl child presenting with acute abdomen diagnosed as torsion of right ovary.

CASE REPORT

Ten year old girl child came with history of severe pain abdomen and vomiting for one day to our pediatric outpatient department. Her pain abdomen was severe, present in the lower abdomen, unable to sleep or eat, not relieved by medication and also had 15 to 20 episode of vomiting, non-bilious and non-projectile. No history of fever, burning micturition or loose stools.

During examination the child's vital parameter was normal. Her abdomen examination reviled tenderness in the right lower quadrant with guarding, no rebound tenderness. Child had tenderness in the pelvic and supra pubic

area, no tenderness in the right inguinal area. Signs of acute appendicitis such as Rovsing and Psoas signs were absent. Other systemic examination was normal.

Laboratory investigation revealed total cell count of 16150 cells/cu.mm with normal hemoglobin, platelet and hematocrit. Ultrasound of the abdomen and pelvis showed enlarged right ovary with decreased venous outflow and normal arterial blood flow with normal left ovary. MRI of the abdomen revealed enlargement of the right ovary measuring 4.5*1.7*2.3 (volume – 8.8 cc) with multiple peripherally arranged subcentimetric follicles and edematous central stoma.

Emergency laparoscopic laparotomy was done, which revealed hem peritoneum (30-40 ml),right fallopian tube edematous and hemato salpinx, with bulky right ovary, there was one torsion of right ovary and fallopian tube, with normal uterus , left ovary and fallopian tube. Bilateral oophoropexy done by Hot dog bun method with no post operative complications. Child was treated with IV antibiotics (ceftriaxone and metronidazole for 5 days). She was discharged after 7 days with no further complications. On follow up examination, child was healthy.

DISCUSSION

Torsion of ovary in children is a rare cause of pain abdomen, its incidence is 3% among causes of acute pain abdomen in females [4]. Frequency of torsion of ovary in common in adolescents and young females [5]. Diagnosis of torsion of ovary is difficult due to other similar conditions like acute appendicitis, urinary tract infections, renal colic and renal stones etc [6]. To diagnose torsion of ovary, ultrasound of abdomen is required. Findings include non-visualized ovary or adnexal mass on the ipsilateral side [7,8].

Children older than 12 years and young women with cyst in ovary, long fallopian tubes and supporting ligaments, venous congestion due to raised pre menarche activity develops torsion of ovary [9].

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