Case Report

Mesenteric abscess presents as left iliac fossa mass in postoperative case of inguinal hernia surgery with undescended testis

Monalisa Mahajan*

Department of Rotating House Physician, Bankura Sammilani Medical College and Hospital, Bankura, West Bengal, India

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*Correspondence:
Dr. Monalisa Mahajan,
E-mail: monalisamahajan96@gmail.com

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ABSTRACT

An abscess is a collection of pus (dead and dying neutrophils plus proteinaceous exudate) that has built up within the tissue of the body. Mesenteric abscess is a rare, usually accounts for small percentage of intra-abdominal abscess after inguinal hernia surgery which is presented as left iliac fossa mass in postoperative period of open inguinal hernia surgery of left side and also presented with undescended testis of left side which is actual cause of formation of inguinal hernia of same side. Late onset mesh infection and post-operative peritonitis are very common in case of open hernia surgery. Intra-abdominal abscess cause significant morbidity and mortality. Surgery disturb the equilibrium between coagulation and fibrinolysis in the abdominal cavity in favour of coagulation system. Diminished fibrin degradation is a common pathway for the formation of abscess. We present a case of 40 years of male came with pain in left iliac fossa and lower abdomen for last 2 months with a swelling at LIF and hypogastric region for last 3 months with a previous history of hernia surgery of left side 2 month back which was diagnosed as mesenteric abscess and treated with exploratory laparotomy under general anaesthesia and abscess was drained.

Keywords: Mesenteric abscess, Inguinal hernia, Undescended testis, MRI, FNAC

INTRODUCTION

Intra-abdominal abscess continues to be an important and serious problem in surgical practice. These are collection of pus that are confined in peritoneal cavity by inflammatory barrier, usually contain a mixture of aerobic and anaerobic bacteria from gastrointestinal tract. The mesentery is a large, fan-shaped, double-layered fold of peritoneum that connects the jejunum and ileum to the posterior abdominal wall. Mesenteric abscess that developed after an inguinal hernia repair that utilized synthetic mesh; a rare condition developed after hernia surgery. Patient present with pain in left iliac fossa with pain in left iliac fossa and hypogastric region followed by hernia surgery of left side in afebrile condition without any comorbidities as a left iliac fossa mass.

CASE REPORT

A 40 years old male came with complain of pain in left iliac fossa for last 2 months with a swelling in left iliac fossa and hypogastric region for last 3 months with a history of open inguinal hernia surgery at left side near about 2 months ago with left sided undescended testis. Undescended testicle descends from the abdominal cavity to the scrotum, along an open channel that usually closes by the time a child is born. A hernia occurs when there a piece of intestine in this case most probably mesentery slides into the channel as in undescended testicles the connection between testicle and abdomen often fails to close, but patient treated by doing open inguinal hernia
surgery without orchidopexy or orchidectomy. Patient was in afebrile condition, no history of any bleeding per stool, no history of vomiting, normotonic, non-diabetic. He presented with loss of appetite and loss of weight reduction.

Figure 1: USG of whole abdomen 3.4 cm* 3.3 cm heterogeneously hypoechogenic mass noted in hypogastrium.

On clinical examination

GCS score is E4M5V5. Performance status 60, according to Karnofsky scale: pallor=absent, icterus=absent, edema=absent, cyanosis=absent.

Inspection

There is an obvious swelling in left iliac fossa and hypogastric region, no any skin discoloration.

Palpation

On palpation abdomen fill soft, a swelling 5 cm × 4 cm mass palpated in left iliac fossa and hypogastric region. Mass is non reducible, not mobile. On Carnett’s test swelling become less prominent that indicate it was an intra- abdominal swelling. In genitalia; lest testis was not palpated. Other systemic examinations are normal.

Diagnostic investigations

Complete blood count hemoglobin % =10, WBC=6500 per microliter, RBC=4.11 million per microliter, ESR=26 mm/h. Random blood sugar 80 mg%, serum urea 27 mg%, serum creatinine 1 mg%, serum sodium 131.7 mmol per litre, and serum potassium 3.91 mmol per litre

Liver function test

Alkaline phosphatase=131 IU/l, serum glutamic pyruvic transaminase=91 IU/l, serum glutamic oxaloacetic transaminase=33 IU/l, total bilirubin=0.65 mg%, and albumin=3.5 mg%.

Serology

HIV1 and HIV1 non-reactive, HBS and anti HCV negative, prothrombin time=12.4, INR=1.06, beta HCG=0.47, and serum LDH=454.3 U/l.

Radiological investigations

Gall bladder was contracted.

Figure 2: X-ray of whole abdomen (erect position) (within normal limit).

Figure 3: X-ray of chest (PA view) (within normal limit).
DISCUSSION

Mesenteric abscess is rare condition, may be find in chronic inflammatory bowel disease but it accounts small percentages of complications followed by inguinal hernia surgery. It is an important and serious complication in surgical practice. It mimics as left iliac fossa mass with pain in abdomen. So, it is least likely diagnosed as mesenteric abscess. Firstly, it diagnosed as intra-abdominal mass as patient was also afebrile. Then it can be confirmed by MDCT and MRI of whole abdomen, and specially USG guided FNAC of mass that indicate presence of abscess. The presence of left sided undescended testis helps us to exclude the cause of inguinal hernia. After that exploratory laparotomy with intra-abdominal orchidectomy give complete cure.

CONCLUSION

A high index of clinical suspicion must be maintained towards the possibility of complication after the inguinal hernia surgery, in particular when same sided undescended testis was found. Detailed examination and by regular analysis of blood investigations, cross sectional abdominal images and FNAC of abscess help to identify the complication after inguinal hernia surgery that present as unexplained left iliac fossa mass.

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