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SPLENUNCULUS: AN UNUSUAL PRESENTATION IN INFANCY

Paediatric Medicine

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ABSTRACT

Splenunculus or Accessory spleen is a benign asymptomatic condition in which splenic tissue is found outside the normal spleen. The size and number of accessory spleen can vary in each individual. Detection of splenunculi is often an incidental finding on imaging. We report a case of splenunculus mimicking clinical splenomegaly in an infant.

KEYWORDS

Splenunculus, Splenomegaly, Infancy

1. INTRODUCTION

Splenunculus is a benign asymptomatic condition with an estimated incidence of 10-30% in general population. It is often a common incidental finding on imaging. It can be a boon or a bane in certain situations. A missed accessory spleen can lead to treatment failure in hemolytic anemia and chronic ITP, but is a boon in cases of traumatic splenectomy .It may mimic neoplastic growth on imaging. Torsion of the accessory spleen though rare can present as acute abdomen. We present a case of splenunculus mimicking clinical splenomegaly in a 7 month old infant.

2. Case Report

Third born male baby of non-consanguineous marriage, now 7 month old, was brought to the clinic for treatment of eczema and on general examination found to have upper abdominal distension. Palpation of abdomen showed left upper quadrant mass suggestive of splenomegaly. Other systems were normal on examination. There were no past or family histories of hematological disorders or malignancies. Infant was growing well and had normal development for age.

Blood tests showed mild hypochromic microcytic anemia (hemoglobin of 10.5 gm/dl, mcv 68.5, mch-22.2,mchc-32). Ultrasound abdomen showed spleen 6.7 cm with normal size, shape and echogenicity. A well-defined round to oval shaped lesion of 1.6 cm by 1.0cm which is similar in echogenicity with spleen was seen adjacent to the splenic hilum –suggestive of splenunculus. No other abnormalities were noted in the scan.

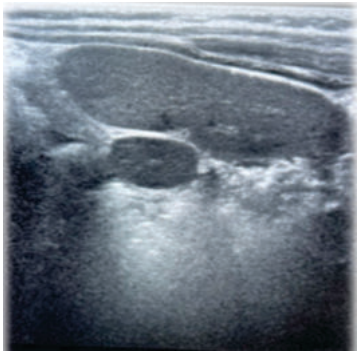

Figure 1: Splenunculus 1.6cm by 1.0 cm at the splenic hilum

DISCUSSION

Splenunculus or accessory spleen is a benign asymptomatic condition in which splenic tissue is found outside the normal spleen. Estimated incidence is about 10-30% of general population. An individual can have typically 1-6 accessory spleen buds and size of an accessory spleen can also vary. Most accessory spleens are approximately 1 centimeter, but it is not uncommon to find accessory spleens larger than a few centimeters[1]. It is a normal anatomic variation resulting from an incomplete fusion of mesenchymal buds during the fifth week of embryonic development[2].

Accessory spleens can be found in different locations, most common (75%) being the splenic hilum . Next common site is near the tail of pancreas (20%). Rest 5% may be found in the gastrosplenic ligament, the lienorenal ligament , the wall of stomach , wall of intestines, greater omentum , mesentery , pelvis and scrotum[3]. Accessory spleens like normal spleen receive their blood supply from splenic artery. Splenic artery divides into branches before it reaches the spleen and each of the branch proceeds to vascularize a subset of the organ. Since accessory spleen receive blood supply from a feeding artery of splenic artery , accessory spleens can act as functional splenic tissue in case of total splenectomy[2].

Detection of splenunculi is often an incidental finding on imaging for a separate clinical query[4].

Clinical scenarios where its presence has importance include:

Clinical conditions requiring therapeutic splenectomy like hemolytic anemia and chronic ITP where failure to remove the accessory spleens can be detrimental as they undergo compensatory hypertrophy on splenectomy leading to treatment failure.

In cases of traumatic splenectomy it can be beneficial to have preserved splenic function in the remaining accessory spleen.

Torsion of an accessory spleen though rare can present as acute abdomen in pediatric patients with acute pain in the left flank or as intermittent pain. Pain from the torsion can arise from inflammation due to infarction or strangulation, venous congestions due to twisting of the vascular pedicle, or direct interference with adjacent organs. Bowel obstruction, peritonitis, and Hemorrhagic shock are potential consequences of untreated torsion of splenunculus[5].

In adults it may be confused with lymph nodes or neoplastic growth or splenosis on CT imaging in such cases Scintigraphy with 99mTc-nanocolloid can confirm accessory splenic tissue. Lymphnodes and noeplastic growth will not demonstrate technetium colloid uptake [2,3,6]. An accessory spleen is congenital and derives its blood supply from splenic artery but splenosis is an acquired condition defined as autoimplantation of one or more focal deposits of splenic tissue in various compartments of the body

CONCLUSIONS

Splenunculus though a common incidental finding in general population on imaging, it does not mimic physical examination findings of splenomegaly which adds to the rarity of our case. The parents were explained about the finding and the clinical significance .To the best of our knowledge we have not come across any such documented pediatric case. There is a case report in an adult 72 year old female with splenunculus mimicking splenomegaly with synchronousHSV1 viremia and myelosuppression[4]. We are presenting this simple but rare case in order to highlight importance of having a broader differential diagnosis in evaluating organomegaly detected on clinical examination. As aptly said our abdomen is truly a Pandora's box .

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