

Few amusing ultrasound signs discovered as a matter of coincidence.

N Mahmood, H Suresh

Citation

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Abstract

The purpose of this series is to describe a few unusual ultrasound appearances that bare a striking resemblance to some common familiar objects .We report three separate cases of intestinal ascariasis, a large urinary bladder diverticulum and a drain site hernia, where the ultrasound findings were rather unusual and amusing bearing striking resemblance to some common objects that prompted us to describe three amusing but uncommon ultrasound “signs” that occurred as a matter of coincidence. The significance of the three signs described is that the resemblance occurred as a matter of chance. The diagnosis in the three cases was otherwise straightforward, but the appearance amusing.

INTRODUCTION

Radiological signs have been described in each and every modality of imaging, right from the beginning of the conventional era. Many signs have been described with the purpose to highlight certain appearances as being pathognomonic or characteristic of the disease. Here we intend to describe few signs which have never been described before.

The significance of these signs lies not in the fact that they helped in the diagnosis, but rather the appearance, as a matter of chance, bore resemblance to some common objects, that we thought was rather amusing.

CASE DESCRIPTIONS

CASE 1

A 13 year old girl came for an ultrasound examination of the abdomen with complaints of severe abdominal pain and vomiting. Ultrasound revealed heavy intestinal round worm infestation, with several roundworms seen stacked beside each other within a single small bowel loop. As a matter of coincidence, when seen in cross section, the stacked round worms lying within a single loop of bowel resembled a “floating Olympics sign” (Video 1).

CASE 2

A 45 year old male presented with complaints of lower abdominal pain. Urine analysis suggested urinary tract infection and ultrasound was suggested. Ultrasound revealed

a single large diverticulum arising from the posterior wall of the urinary bladder. Floating echoes were noted within which through the narrow neck was seen to settle along the floor of the diverticulum - thus prompting us to call this the “Hour glass diverticulum.” (Video 2).

The prostate was normal in size, but there was significant post void residue.

CASE 3

A 35 year old female presented to us with complaints of a swelling in the anterior abdominal wall. She gave a history of abdominal surgery , and the referring surgeon suspected a drain site hernia for which an ultrasound was requested for. Ultrasound revealed a parietal wall defect at the drain site. On asking the patient to cough, a small portion of the omentum was seen to herniate across a flap through the defect (Video 3). The appearance was amusing and as a matter of coincidence resembled a “Jack in the box.”

DISCUSSION

The sonographic features of biliary and intestinal ascariasis in children has been previously described ¹. In our case, the stacked round worms resembled an Olympics sign, seemingly floating. Irrespective of the amusing signs described, we feel the sonographic diagnosis of intestinal ascariasis is usually a straightforward one, but if one does come across “the floating olympic sign” by coincidence, the only significance is that the worm load is heavy. Otherwise this is yet just another amusing sign that one might

encounter as a matter of coincidence.

Cases of giant urinary bladder diverticulum have been described previously in literature ^{2,3}. Our case describes a solitary large diverticulum, the sonographic features of which have not been described previously. In our case, ultrasound showed a large diverticulum arising from the posterior wall of the urinary bladder with floating internal echoes settling along the floor of the diverticulum. The similarity in the size of the distended bladder and the diverticulum, together with the narrow neck positioned right in the middle of the posterior bladder wall, along with floating internal echoes, settling along the floor, put together resembled an “hour glass.” We feel this hour glass diverticulum on ultrasound is just a matter of pure coincidence ; this alone remains the significance. Otherwise the complications and clinical features are similar to any other giant diverticulum.

Herniation through an abdominal drain site is rare and is usually associated with strangulation of the small bowel ^{4,5}. Our case describes a rare case of drain site hernia associated

with herniation of only the omentum. There was no evidence of any incarceration. The omentum herniated intermittently as the patient coughed, across a flap through the parietal wall defect, closely resembling a “Jack in the box.” The small bowel loops stayed back in the peritoneal cavity thus facilitating the “Jack in the box sign.”

The only significance of this sign being, that it rules out a more dangerous strangulated or incarcerated drain site hernia. Otherwise it is just another amusing sign.

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Author Information

Nabil S Mahmood, F.R.C.R

Department of Radiodiagnosis and Imaging- Department of Radiodiagnosis and Imaging, Father Muller Medical College

Hadihally B Suresh, M.D

Department of Radiodiagnosis and Imaging, Father Muller Medical College