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ROLE OF IMAGING IN DIAGNOSIS AND DIFFERENTIAL DIAGNOSIS OF ASCITES FROM LARGE ABDOMINAL CYSTIC MASSES

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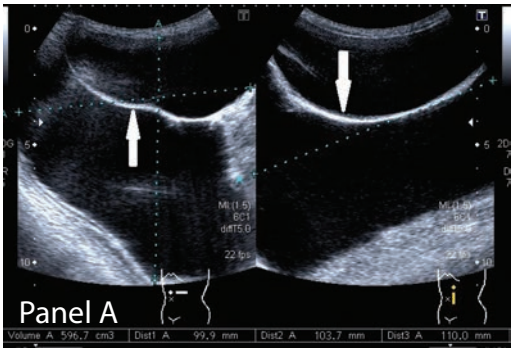

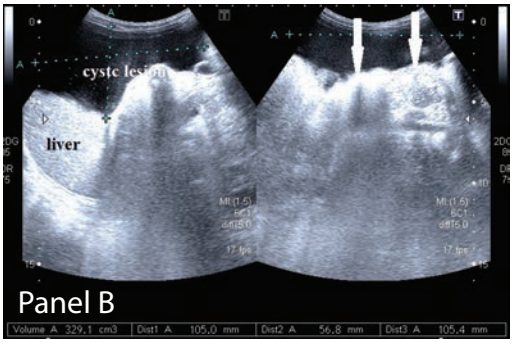

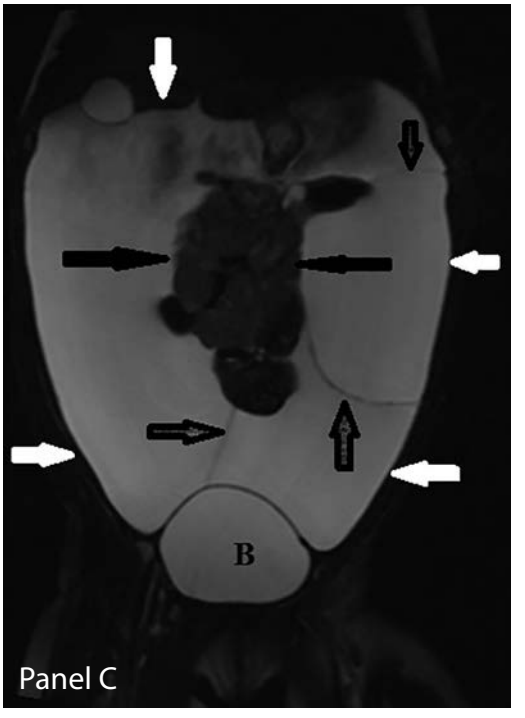

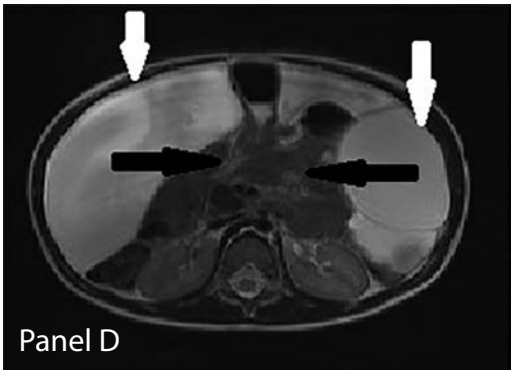

A 3-year-old girl was admitted to the hospital due to ascites of unknown origin, detected during ultrasound (US) examination in a secondary hospital, performed due to a painless, but distended abdomen. The girl was healthy with normal appetite, defecation and voiding, only her abdomen has been prominent from birth. All laboratory tests were normal, including plasma proteins and the urine analysis. US of the left abdomen, which is filled

with a huge cystic lesion (black) with thinned septa (white arrows; Panel A). US examination of the upper abdomen: a cystic lesion is located infrahepatically and it is pushing down the air-filled bowel loops (white arrows; Panel B). The fluid collection filled almost entire abdominal cavity. Both ovaries and uterus were normal. The first differential diagnostic option was a cystic mesenterial lesion; a mesenteric lymphatic malformation, mesenteric cyst or even cystic teratoma. Mesenterial location was confirmed by abdominal MRI (Panel C: MRI (coronal fluid sensitive sequence): huge cystic lesion (white arrow) with septa (empty arrows) pushing the bowel loops centrally and down (black arrows); B- the urinary bladder; Panel D: MRI (axial fluid sensitive sequence): huge cystic lesion (white arrow) with septa (empty arrows) pushing the bowel loops centrally and down (black arrows); B- the urinary bladder. The histological analysis of the surgically resected mass (total volume of 3 litres) identified the lesion as a giant cystic lymphatic malformation originating from the lesser curvature of the stomach. US is an important imaging tool when differentiating ascites from cystic lesions and in differential diagnosis of cystic lesions, which is sometimes difficult in unexperienced hands, particularly when a huge lesion is presented. Distribution of fluid is most helpful – ascites is found around the liver, spleen, hepato-renal recessus, between the bowel loops and in the pelvis. A mass effect of a huge cystic lesion and specific features of internal structure is a pathognomonic sign. Lymphatic malformations are slow growth, benign tumors, which originate from lymphatic channels, and in 1% are located in the abdomen. Life-threatening complications may occur (partial bowel obstruction, torsion, volvulus, perforation). Therefore, immediate treatment is recommended upon diagnosis.

Key words: Differential diagnostic imaging ▪ Abdominal lymphatic malformation ▪ Ascites.

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