



Infarction of three spleens due to torsion in a patient with incomplete situs inversus – a case report

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Background:

Splenic infarction is considered a rare cause of abdominal pain. Incomplete situs inversus is an infrequent condition in which the organs of the abdomen are arranged in a mirror image reversal of the normal positioning with the heart on the normal left side of the thorax. In 95% of cases, congenital heart disease is present. It is associated with asplenia or, less commonly, polysplenia.

Case presentation:

A 12-year-old female patient was admitted to the Department of Pediatric Surgery due to abdominal pain and multiple vomiting with gastric content since the morning. In the abdominal ultrasound, several oval areas of intermediate echogenicity were detected on the right side of the lower abdomen and between the right kidney and liver. Due to the atypical image on ultrasound and abdominal x-ray, it was decided to expand the diagnostics. The CT scan of the abdomen with contrast revealed: incomplete situs inversus with 13 spleens, of which three were not enhanced after administration of contrast (image of the splenic infarction). Three spleens measuring 41x30x62 mm, 65x33x60 mm, and 14x11x10 mm were located laterally to the right kidney. A cardiologist consulted the patient and no relevant abnormalities were found. The patient was qualified for laparoscopic surgery.

Conclusion:

CT scan with contrast is the primary modality in the diagnosis of abdominal organs infarctions. Splenic torsion is a rare but clinically important cause of acute abdomen, that should be recognized as fast as possible by the physician. Incomplete situs inversus may be the reason for delayed diagnosis of emergencies and may require the use of extended diagnostics.

Keywords:

acute abdomen, radiology, situs inversus, spleen infarction