

Splenic torsion, an unusual cause of acute abdominal pain.

M Murthy, S Rajani, K Bhagheerathi

Citation

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Abstract

Torsion of spleen is a rare cause of acute abdominal pain leading to splenic infarction. We report a case of splenic torsion in a middle aged female and highlight the role of CT in its diagnosis.

CASE HISTORY

A 36 yrs old female reported to the Casualty

Department with complaints of severe abdominal pain all over the

abdomen of few hours duration. Clinical examination revealed

nondistended abdomen with tenderness and guarding in the left

hypochondrium. USG revealed moderately enlarged spleen in a

more anterior location in left hypochondrium. Plain CT showed an

enlarged spleen in ectopic position anterior to stomach (Fig. 1)

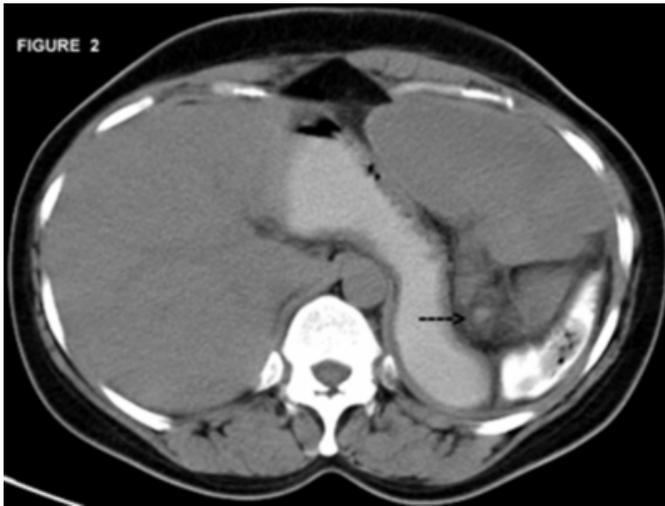
Figure 1



with a hyperdense foci in the vascular pedicle of spleen [black

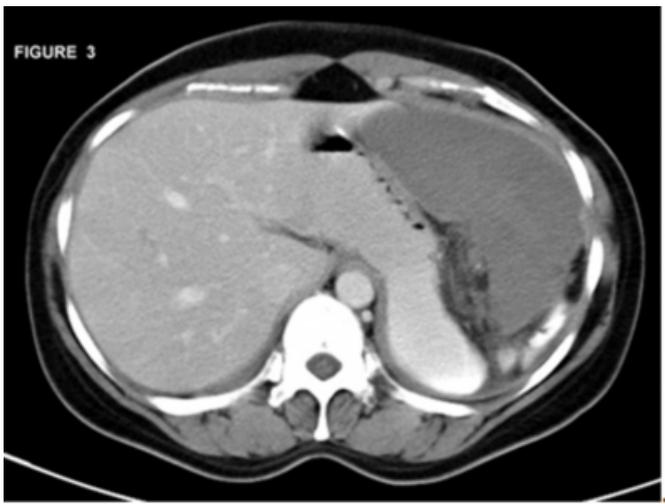
arrow in (Fig. 2)].

Figure 2



representing acute thrombus secondary to stasis. CECT scan revealed a nonenhancing enlarged spleen in the ectopic position (Fig. 3)

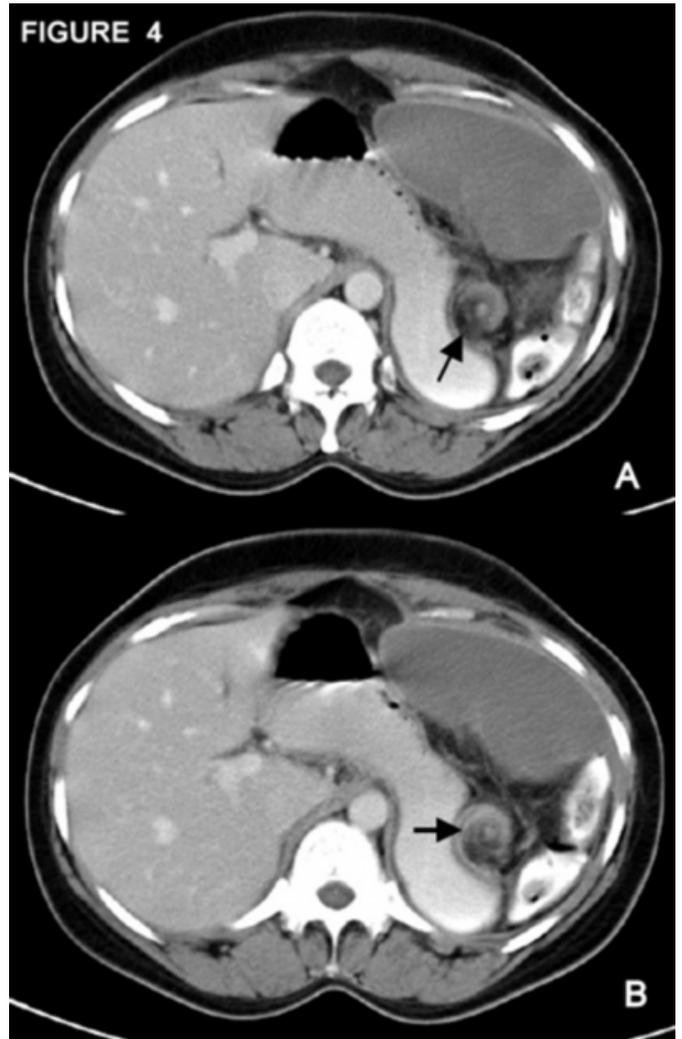
Figure 3



with a classical whorled appearance of the splenic vascular pedicle

[black arrows in (Fig 4)].

Figure 4



suggesting torsion with infarction. In view of these findings

laprotomy and splenectomy was done. Intraoperatively the splenic

vascular pedicle was twisted at least to 540 degrees.

DISCUSSION

Splenic torsion is a rare cause of acute abdominal

pain due to hypermobile wandering spleen. It has been diagnosed

in approximately 0.3 % of 1,413 cases of splenectomy in a study

by Eraklis et al [1] . Wandering spleen is an uncommon condition

Splenic torsion, an unusual cause of acute abdominal pain.

characterized by laxity of the supporting ligaments [2] .
Incomplete

development/laxity of the anchoring ligaments of spleen –
gastrosplenic, lienorenal ligaments leads to the hypermobility
resulting in wandering of spleen to an ectopic position and
subsequently torsion [3,4] . The laxity of ligament is due to the
incomplete fusion of dorsal mesogastrium with the
peritoneum that
overlies the left kidney leading to the development of long
vascular
pedicle contributing to hypermobility [5] .

In adults especially women, splenic torsion is attributed to
acquired
abnormality such as ligament laxity, splenomegaly, trauma
and
hormonal effects of pregnancy.[6]

Symptoms vary with the degree of torsion 90 – 2160
degrees,
presenting as an incidental mass on physical examination,
mild
abdominal pain due to vascular congestion, acute abdomen
due to
torsion of splenic pedicle with infarction [5] . Pain is usually
caused
by the capsular stretching and local peritonitis [6] .

In plain radiograph, it may appear as an abdominal mass
with
absence of splenic shadow in left upper quadrant or as a
large mass
in the left flank[7] . Ultrasound reveals splenomegaly with
heterogenous echotexture in ectopic position. Color Doppler
shows
decreased perfusion due to torsion [8]. CECT reveals the
ectopic
position of the enlarged spleen with little or no contrast
enhancement [5,8]. Swischuk et al[3] described the whorled
appearance of the twisted vascular pedicle of spleen as a
valuable
finding in making the diagnosis.

The current treatment for splenic torsion with infarction is
Splenectomy [4,7].

References

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Author Information

MGK Murthy, MD, DNB

Consultant radiologist Yashoda Hospital, Hyderabad, Andhra Pradesh , India.

S. Rajani, DNB

Consultant radiologist, Prime and Yashoda Hospital , Hyderabad, Andhra Pradesh, India

K. Bhagheerathi, DNB

Radiology Resident , Yashoda Hospital, Hyderabad, Andhra Pradesh, India