

CASE REPORT

A RARE CASE REPORT OF SITUS INVERSUS TOTALIS WITH RUPTURED AMOEBIC LIVER ABSCESS IN A PATIENT SUFFERING FROM SERUM HEPATITIS

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ABSTRACT: SITUS INVERSUS VISCERUM: The literal meaning of: Inverted position of internal organs is a rare autosomal recessive disorder with incidence of 0.001% to 0.01% with male: female ratio of 3:2.⁽¹⁾ It can be either total or partial. Total situs inversus is characterized by mirror image dextrocardia where the heart and stomach is present on right side of midline and liver and gall bladder on left side. Generally this rare genetic anomaly is discovered/diagnosed incidentally during thoracic and abdominal imaging. Here we are presenting you a case of situs inversus totalis with ruptured amoebic liver abscess in a patient of serum hepatitis which is a rare clinical entity.

KEYWORDS: Situs inversus totalis, Ruptured amoebic liver abscess, Dextrocardia, Serum hepatitis.

CASE REPORT: A 52 years old male, daily labour, presented to us with chief complaints of fever for 1 week, pain abdomen for 5 days and yellowish discolorations of sclera for last 2 days.

Fever was of high grade and associated with chills and rigor, pain abdomen initially started in left hypochondrium and gradually felt over all the quadrants of abdomen. Patient also developed yellowish discoloration of the sclera. He is a known smoker and alcoholic.

Thorough clinical examination performed which revealed presence of apex beat on right 5th inter costal space, indicating dextrocardia. Per-abdominal examination revealed guarding and rigidity along with tenderness all over the abdomen, features which are suggestive of peritonitis. There was presence of inter costals tenderness along the lower left rib cage.

From clinical examination a provisional diagnosis of ruptured liver abscess with possibility of situs inversus totalis is made.

Relevant investigations were done to establish the diagnosis. Routine blood investigations revealed patient is anemic with Hb% of 6gms and there is slight elevation of bilirubin with elevated liver enzymes. Viral markers study was performed which turned out to be positive for Hepatitis-B.



Fig. 1: X-ray Chest Revealed apex of Heart on right side. Fundic gas shadow is found under the right dome of diaphragm

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Fig. 2: ECG findings revealed dextrocardia

USG of abdomen and pelvis revealed liver & GB on left side with ill-defined Hypochoic area near surface with perihepatic and subhepatic collection tracking in left paracolic gutter. Spleen is found on right side.

Plain CT scan of chest revealed presence of dextrocardia with bilateral pleural effusion (Lt>Rt) and left hemithorax contained trilobed lungs and right hemithorax have bilobed lungs.

Plain CT abdomen revealed liver and gall bladder on Lt hypochondrium while spleen on R hypochondrium. Pancreas is found to be normal and its head towards left kidney.

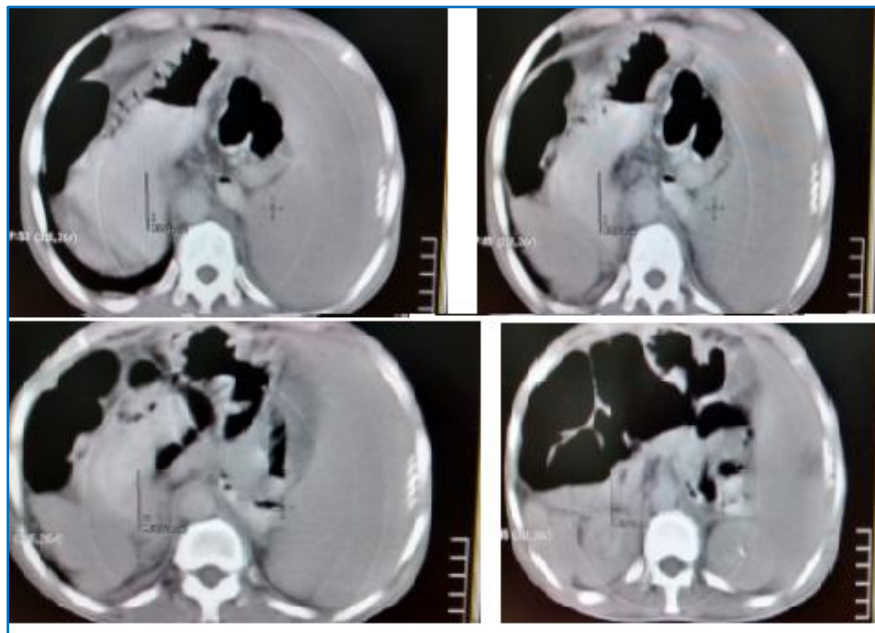


Fig. 3: CECT Abdomen confirmed Situs Inversus totalis with Presence of Solitary Liver abscess at the Lt lateral Margin of Liver

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Fig. 4

All these investigations revealed presence of situs inversus totalis with ruptured liver abscess. Exploratory laparotomy performed through midline incision.

On opening the abdomen almost about 200 ml of anchovy sauce pus aspirated. On further exploration a solitary abscess cavity is found on left lobe of liver which is found on left hypochondrium.

Spleen is found on right side with stomach found to be on the right side of midline.

On further exploration caecum and appendix are found to be on left iliac fossa. SITUS INVERSUS TOTALIS is confirmed on table.



Fig. 5

Thorough peritoneal toileting was done. Flank drains were kept. Abdomen was closed in layers.

Post-operative period was uneventful.

Patient was discharged on 10th Post-operateday.

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CONCLUSION: From the clinical examination and relevant radiological evidence and on table findings, it is concluded that the patient is suffering from ruptured solitary liver abscess with evidence of situs inversus totalis, which is a rare clinical entity.

DISCUSSION: Situs inversus viscerum, the literal meaning, inverted position of internal organs is a rare autosomalrecessive disorder with a population incidence of 0.001% to 0.01% and male: femaleratio of 3:2.⁽¹⁾

It is suggested that the immobility of nodal cilia inhibits the flow of extra-embryonic fluid during the embryonic period which manifests later as situs inversus.

Condition affects all major structures within thorax and abdomen where the major visceral organs are reversed or removed from their normal position.

Situs inversus can be of 2 types-one is complete or total situs inversus and the other one is incomplete situsinversus.

Situsinversustotalis is associated with dextrocardia. The incidence of congenital heart disease (CHD) in this group is around 5%.

Incomplete situsinversus otherwise known as situs inversusin completus is associated with Levocardia. The incidence of CHD in this group is as high as 95%.

There have been cases reported previously with variety of clinical manifestations such as bronchitis, sinusitis, situsinversus, azoospermia,⁽²⁾ immotile cilia syndrome with retinitis pigmentosa,⁽³⁾ immotile cilia syndrome with azoospermia.⁽⁴⁾

25% of patients of situsinversus also have the condition affecting the cilia, which caused it to beat backwards and makes patient much susceptible to illness.

The condition is known as primary cilliary dyskinesia (PCD). They are susceptible to lung infections. PCD is also associated with infertility.

Situsinversustotalis when associated with PCD it is called as Kartageners syndrome.⁽⁵⁾

Kartageners syndrome encompasses: situsinversustotalis, chronic sinusitis and Bronchiectasis.

Presence of situsinversus can produce dilemma in reaching a clinical diagnosis.

It also poses problems in organ transplants as most of the donors are situs solitus. Hence geometrical problems arise in placing an organ into a cavity shaped in the mirror image.

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