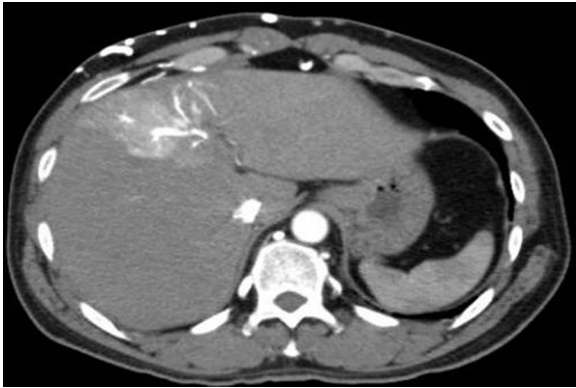


QUIZ 1

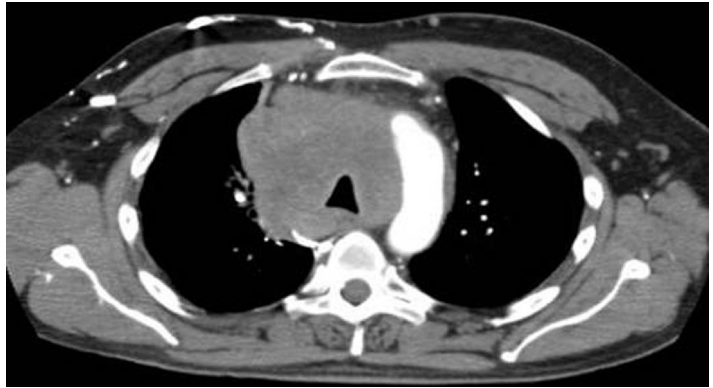
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A



B

Questions _____

Q1. What is the abnormality in above CT images A and B?

Q2. What is your probable diagnosis considering both pictures A and B?

Q3. What is the cause of hepatic finding?

Q4. What other modalities can be carried out to demonstrate this hepatic finding?

QUIZ 1

Answers

Answer 1: Contrast CT scan through upper abdomen shows following abnormalities:

- a) Focal enhancement in segment IV of liver.
- b) Enhancing collateral vessels on the anterior abdominal wall.

Contrast CT through anterior mediastinum shows following abnormalities:

- a) Soft tissue density mass causing obstruction of SVC and encasement of both pulmonary hilar vessels and bronchi.
- b) Enhancing collateral vessels on anterior chest wall.

Answer 2: Focal liver enhancement secondary to SVC obstruction by mediastinal nodal mass.

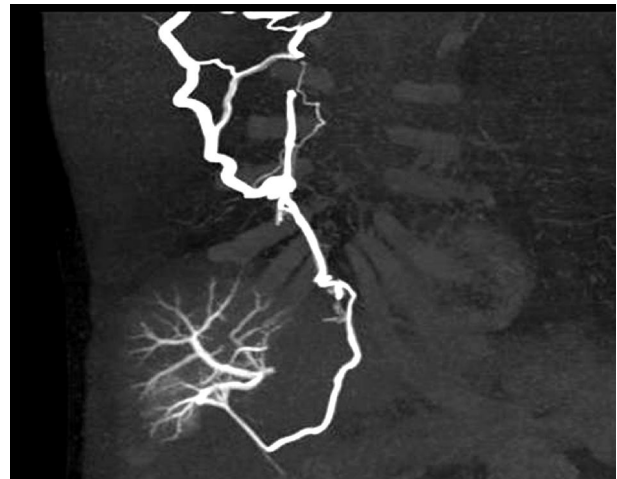
Answer 3: This focal liver enhancement is secondary to following collateral pathways:

- a) Porto-systemic shunting between superficial epigastric veins with patent remnant of a umbilical vein which drains into left portal vein. Other collateral veins develop is falciform ligament connecting deep epigastric with superficial veins of abdominal wall and hence with left portal venous system.
- b) Increased enhancement in bare area of right and left lobe is due to musculophrenic collaterals

Answer 4: Scintigraphy: Technitium sulfur colloid scan of liver shows focal area of increased uptake as "HOT SPOT SIGN"

Angiography: This porto-systemic shunting can also be demonstrated angiographically. The first case reported by Lee et al. However C.T. angiography being least invasive is preferred over conventional angiography nowadays.

MIP image of the same patient shows collateral vessels from anterior chest wall extending into the liver.



References

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2. Asante M. Dickson. The Focal Hepatic Hot Spot sign. *Radiology* 2005;**237**:647-648.
3. Lee KR, Preston DF, Martin NL, Robinson RG. Angiographic documentation of systemic-portal venous shunting as a cause of a liver scan "hot spot" in superior vena caval obstruction. *AJR* 1976;**127**:637-639