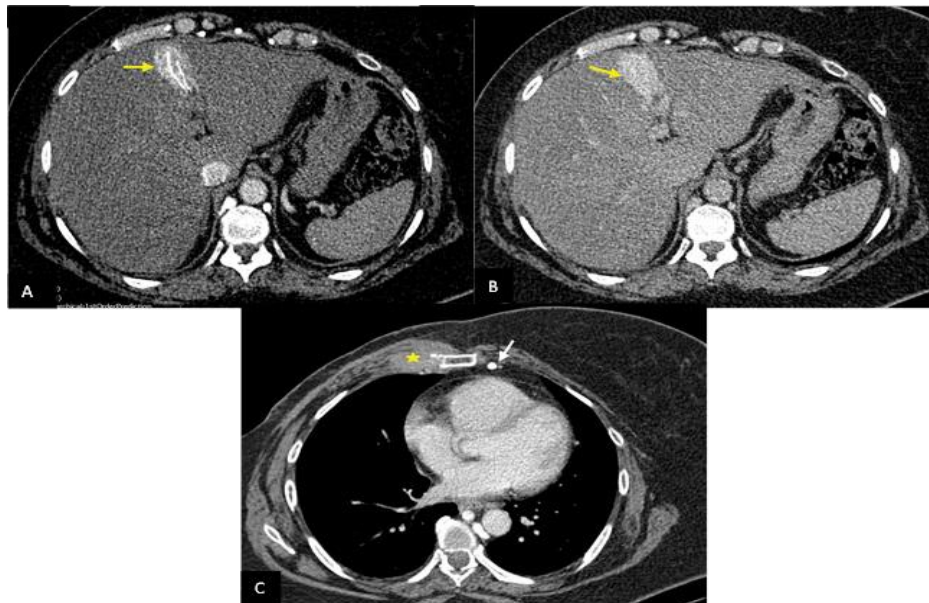


Clinical-Medical Image

## Hot Spot Sign: An Indicator of Thoracic Central Venous Obstruction

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**Figure 1:** Axial views of an abdominal enhanced CT scan in arterial (A) and portal (B) phases, showing the hot spot sign as a well-defined focal enhanced area of segment IV of the liver (yellow arrows). The thoracic enhanced CT scan (Image C) shows a mass in mastectomy zone (yellow star) invading the right internal mammal artery and vein (compared to contralateral vessels shown with white arrows).

### Clinical Image

The hot spot sign is a radiological sign found in a contrasted CT-scan or technetium 99 m sulfur colloid scans. It was first described in 1983 by Ishikawa. It corresponds to a focal well shaped enhanced area in arterial or portal phase within the quadrate lobe of the liver also known as the IVb segment of the Bismuth-Couinaud classification system. It was first diagnosed in a superior vena cava syndrome and is caused by portosystemic venous shunt between the superior vena cava (SVC) and portal vein, mostly due to the obstruction of the SVC. Thus, it reflects an increased blood flow due to the shunting. It is an indicator of a thoracic central venous obstruction, as seen in the images above, showing a hot spot sign caused by the right internal mammal vein obstruction secondary to the recurrence of a breast cancer invading the internal mammal vessels (Figure 1).

**Keywords:** Hot spot sign; Quadrate lobe liver thoracic; Venous obstruction imaging

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