Computed tomography (CT) scan of chest showed a well-defined rounded minimally heterogeneously enhancing soft-tissue density lesion of size 7.1 cm × 7.7 cm × 9 cm in the right middle lobe with major fissure displaced inferiorly [Figure 2].

Fine-needle aspiration cytology from the area of concern was inconclusive. CT-guided core biopsy from the lesion was performed that on histopathological examination showed pattern characteristic of bronchoalveolar cell carcinoma [Figure 3].

**QUESTIONS**

Question 1: What is the characteristic radiological sign evident on CT image?

Question 2: Briefly describe this radiological sign.
ANSWERS

Answer 1: CT angiogram sign (seen as prominent pulmonary vasculature within pulmonary mass)

Answer 2: CT angiogram sign represents the enhancement of unaffected pulmonary vessels coursing through low-attenuating consolidated lung parenchyma (filled with mucus and fluid) relative to chest wall musculature. This sign was first described by Im et al.\textsuperscript{[1]} in 1990 as visualization of normal pulmonary vascular architecture within parenchymal consolidation as a specific feature of bronchoalveolar carcinoma. They described that abundant mucin within the bronchoalveolar carcinoma by virtue of low density contributes to low attenuation of parenchymal consolidation and permit the vessels within the consolidation to be identified clearly on contrast-enhanced CT scan.

This sign was initially described as specific sign of lobar consolidation due to bronchoalveolar carcinoma with a specificity of 92.3%.\textsuperscript{[1]} Subsequently, it was observed that the sign was not specific for bronchoalveolar carcinoma only and may be seen in both malignant and nonmalignant conditions such as primary pulmonary lymphoma, postobstruction pneumonias and pneumonitis without central obstruction, lipid pneumonias, passive atelectasis, pulmonary edema, and metastasis from gastrointestinal carcinoma.\textsuperscript{[2,3]} Some technical factors may contribute to poor detection of this sign such as inadequate contrast material versus bolus injection of contrast material administered intravenously.

Poor specificity of CT angiogram sign for bronchoalveolar carcinoma nowadays may be partly due to lack of adherence to criteria described by Im et al.\textsuperscript{[1]} such as pulmonary vessels extending 3 cm or more along a single channel and diffuse homogenous low attenuation of the consolidated lung parenchyma compared to chest wall musculature attenuation. Although considered nonspecific for bronchoalveolar carcinoma, CT angiogram sign is an important radiological sign on contrast CT scan for evaluation of pulmonary lesions, particularly when it is correlated with the clinical scenario, where it may narrow down the differential diagnosis.

Declaration of patient consent
The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest
There are no conflicts of interest.

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