

## Image section: Answers

**There is a solitary mass in the right lower zone with multiple specs of calcification. This pattern of calcification is called “popcorn calcification”. Popcorn calcification is pathognomonic of pulmonary Hamartoma**

**Pulmonary Hamartoma:** (synonyms: mesenchymoma, chondroid mesenchymoma)

Hamartomas of the lung are benign lesions composed of an abnormal mixture of epithelial and mesenchymal elements. Now they are considered to be benign mesenchymal neoplasms, the epithelial component is reactive. Hamartomas are more frequent in men than women. Most are found in the 6th to 7th decades, and most of the patients with hamartomas are smokers. Over 90% of the tumors are peripheral, and 10% or less are endobronchial. The peripheral tumors constitute 7-14% of radiographic, solitary pulmonary nodules. The tumors first appear in adulthood and continue to increase in size at a slow rate.

### Clinical features

Peripheral nodules are asymptomatic; endobronchial lesions are frequently associated with symptoms or signs of obstruction like endobronchial lipomas. As such, they must be distinguished from malignant neoplasms or recognized as the cause of a pneumonia or atelectasis. Parenchymal opacities or atelectasis occur with endobronchial tumors, and the lesion can be seen by bronchoscopy

### Radiographic changes

Peripheral lesions have no predilection for any lobe. These appear as solitary, round nodules. Characteristic popcorn calcification is seen on plain films in about 10% of cases. On HRCT, the lesion is considered to be diagnostic of hamartoma. It is less than 2.5 cm in diameter, has a sharp, smooth wall and contains fat or calcification and fat.

### Management

Operative management or non-operative follow-up for slowly-growing asymptomatic lesions <2.5 cm in diameter has been advocated.

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