

## Pipe-cleaner sign

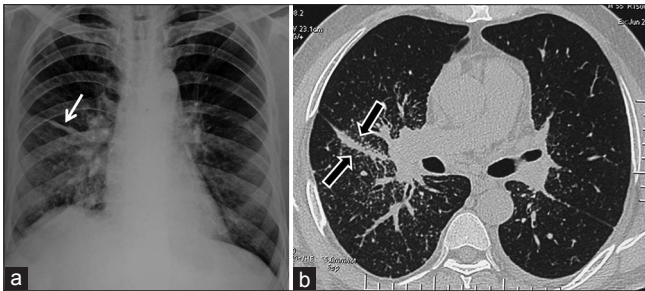
Sir,

We would like to highlight an important forgotten sign on chest computed tomography (CT) known as the “pipe-cleaner” sign. This sign is diagnostic of pulmonary sarcoidosis in a given clinical context.<sup>[1]</sup> The sign is seen due to pulmonary nodules within the bronchovascular lymphatics, also known as perilymphatic nodules. The nodules in the perilymphatic distribution result in nodular bronchovascular interstitial thickening. When this thickening is seen along the major fissures, it resembles a pipe-cleaner. A pipe-cleaner is a type of brush originally intended for removing moisture and residue from smoking pipes [Figures 1 and 2].

Perilymphatic nodules are nodules along the lymphatics and are seen along the pleural surface, large vessels and bronchi, interlobular septa, and centrilobular regions and are usually less than 5 mm in size. Diagnostic differentials for perilymphatic distribution of nodules on chest CT are sarcoidosis, lymphangitic carcinomatosis, silicosis, coal worker’s pneumoconiosis,



**Figure 1:** Illustration of a pipe-cleaner used to clean smoking pipe



**Figure 2:** (a) Chest radiograph showing nodular thickening of the right fissure (arrow) with ill-defined nodules in the right lower zone and tenting of the right diaphragm. (b) Axial chest CT scan showing nodular fissural thickening (arrowhead) resembling a pipe-cleaner. In addition, a few perilymphatic and centrilobular nodules are seen in the bilateral lungs

lymphoma, lymphoid interstitial pneumonia, and rarely amyloidosis.<sup>[2]</sup>

We wish to emphasize that both clinicians and radiologists who are regularly seeing and interpreting chest CT scans should be aware of this sign.

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### Conflicts of interest

There are no conflicts of interest.

**Binith Sureka, Kalpana Bansal,  
Dipanjana Panda<sup>1</sup>, Sachin Kumar<sup>2</sup>**

*Departments of Radiology, <sup>1</sup>Oncology and <sup>2</sup>Pulmonary Medicine,  
Institute of Liver and Biliary Sciences, New Delhi, India  
E-mail: binitisrekapgi@gmail.com*

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