

(*del Radiology)

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Idiopathic interstitial pneumonias comprise usual interstitial pneumonia (UIP), nonspecific interstitial pneumonia (NSIP), desquamative interstitial pneumonia (DIP), respiratory bronchiolitis-associated interstitial lung disease (RB-ILD), cryptogenic organizing pneumonia (COP), acute interstitial pneumonia (AIP), and lymphoid interstitial pneumonia (LIP). Each of these entities has a typical imaging and histologic pattern, although in practice the imaging patterns may be variable. Each entity may be idiopathic or may be secondary to a recognizable cause such as collagen vascular disease or inhalational exposure. The diagnosis of idiopathic interstitial pneumonia is made by means of correlation of clinical, imaging, and pathologic

features. The characteristic computed tomographic (CT) features of UIP are predominantly basal and peripheral reticular pattern with honeycombing and traction bronchiectasis. NSIP is characterized by predominantly basal ground-glass opacity and/or reticular pattern, often with traction bronchiectasis. DIP and RB-ILD are smoking-related lung diseases characterized by ground-glass opacity and centrilobular nodules. COP is characterized by patchy peripheral or peribronchovascular consolidation. AIP manifests as diffuse lung consolidation and ground-glass opacity. LIP is associated with a CT pattern of ground-glass opacity sometimes associated with perivascular cysts.

July Review

Idiopathic Interstitial Pneumonias: CT Features¹

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With modern computed tomography (CT) and magnetic resonance (MR) imaging equipment, the diagnosis of

most renal masses is usually straightforward and accurate. The major question to be answered is whether the mass

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How I Do It How I Do It: Evaluating Renal Masses¹

represents a surgical or nonsurgical lesion or, in some cases, if follow-up studies are necessary. This evaluation usually can be accomplished if a high-quality examination is performed, if the clinical history of the patient is kept in mind, if conditions that mimic a renal neoplasm are considered and excluded, and if there is an awareness of the

potential pitfalls and limitations of CT and MR imaging. In this article, the authors present their technique in the performance of CT and MR imaging examinations, summarize their approach to the diagnosis of renal masses, review the imaging findings in these lesions, and stress the limitations in renal mass diagnosis.

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September Review

How I Do It Obstructive Sleep Apnea in Pediatric Patients: Evaluation with Cine MR Sleep Studies¹

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Cine magnetic resonance (MR) imaging sleep studies have become a useful tool in the evaluation of obstructive sleep apnea in children with certain categories of pathologic conditions. In this article, the author describes a program for the use of cine MR sleep studies in the evaluation of children with obstructive

sleep apnea. The following areas are discussed: clinical indications, patient preparation, anatomic considerations, MR technique, technical issues, image interpretation, commonly encountered diagnoses, volume segmentation processing of data, and controversial areas.