

Vasculitis Involving Cardiovascular System: Assessment With Cardiac CT And MRI

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Vasculitis, characterized by inflammation of vessel walls, is comprised of heterogeneous clinicopathological entities, and thus poses diagnostic challenge. The most widely used approach for classifying vasculitides is based on the International Chapel Hill Consensus Conference (CHCC) nomenclature system. On the basis of the recently revised CHCC 2012, we propose a CT-based step-by-step approach for vasculitis as the following: 1) approach based on size and type of affected vessels, 2) approach based on specific location and morphologic characteristics, 3) approach based on the presence of etiology or associated systemic disease. Finally, vasculitis mimics should be differentiated, because erroneous application of immunosuppressive drugs on vasculitis mimics may be ineffective or even deteriorating. This article presents an overview of the revised CHCC 2012, and a CT-based step-by-step approach for vasculitis and vasculitis mimics. The utility of computed tomography (CT) in the diagnosis of vasculitis lies in the fact that both lumen and vascular wall can be evaluated with this non-invasive imaging modality.