Short communication

Takayasu arteritis: Diagnostic approach

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Abstract:

Takayasu Arteritis (TA) is an immune-mediated vasculitis characterized by a systemic large-vessel vasculitis of unknown etiology that most commonly affects women of childbearing age. This report demonstrates the importance of diagnostic approach in rare case of Takayasu's arteritis patients. This is a case report presenting a 25-years-old female complained a recurrent left arm pain which worsened when she worked as a doctor. Formerly, she had experienced intermittent bilateral leg pain for four years and audible sound coming from inside her neck and there were blood pressure difference >10 mmHg between arms. There was increased CRP and ESR. CT angiography was then performed and showed multiple stenosis in large arteries including bilateral neck area, shoulder area, abdominal aorta, and right renal artery. The other laboratory data to exclude differential diagnosis are unremarkable. Vasculitis syndromes are classified according to the size of affected vessels, into large-vessel, medium-vessel, and small-vessel vasculitis. Site of affected vessel should be the entry point for making diagnostic approach in vasculitis suspected patient. Takayasu arteritis involves the aorta and its major branches. The diagnosis of TA should be made according to which vessel vasculitis involvement, lesions distribution and disease activity. In this case, the blood vessel involved are large vessel vasculitis which consistent with Takayasu arteritis. Based on angiographic classification of TA, this patient was confirmed as Type-V vessel involvement with active disease activity.

INTRODUCTION

Takayasu's arteritis is a chronic granulomatous vasculitis affecting large arteries: primarily the aorta and its main branches.1 The data on the epidemiology of TA is limited, it could be due to the rarity of the disease. Although the disease has a worldwide distribution, it is generally thought to be much more common among Asian populations. The incidences of TA were estimated to be 1–2 per million in Japan and 2.2 per million in Kuwait. Recent epidemiologic studies suggest that TA is being increasingly recognized in Europe with reported incidence estimates varying from 0.4 to 1.5 per million. The highest ever prevalence of TA at 40 per million was estimated in Japan and the lowest ever one at 0.9 per million in US.2 Vasculitis syndromes are classified, according to the size of the affected vessels, into large-vessel, mediumvessel, and small-vessel vasculitis. Large-sized vessel vasculitis, ie, vasculitis occurring in the aorta and its major branches to the extremities, the head and the neck, includes Takayasu arteritis.3 Takayasu's arteritis may occur either as a primary process or secondary to other associated conditions. Secondary vasculitis may be associated with connective tissue disease, infection, malignancy, drugs or other factors. The American College of Rheumatology (ACR) includes arteriogram abnormalities in the diagnostic criteria of the disease. Angiography is the gold standard for evaluation of vascular lesions. Angiography allows a topographic classification which correlates anatomic involvement, clinical manifestations and prognosis: in 1994 the Takayasu Conference in Tokyo proposed an angiographic classification that allows to distinguish different subgroups of patients with six patterns of involvement with the appendage of a "C" or "P" to denote coronary or pulmonary involvement, respectively.4 It is important to identify active diseases since it requires immunosuppressive treatment, but it is unclear whether immunosuppression is effective in the late stage of the disease when a risk-benefit balance must be made.

BIOGRAPHY

Malikul Chair has completed his Internist from Medicine Faculty of Indonesia University, Jakarta, Indonesia and also Specialization in Rheumatology from Division of Rheumatology, Medicine Faculty of Indonesia University in Jakarta, Indonesia. He has published papers in Indonesian Journal of CHEST Critical and Emergency

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