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RESEARCH ARTICLE

TAKAYASU'S ARTERITIS: A CASE REPORT

[1,]Dr. Vimal Ranka and [2]Dr. Jimit Patel

[1]Senior Consultant Physician, Rajasthan Hospital Shahibaug, Ahemdabad, 380004; [2]Resident Doctor DNB Medicine at Rajasthan Hospital Shahibaug , Ahemdabad 380004

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Corresponding author:** ***Dr. Vimal Ranka

ABSTRACT

Takayasu's arteritis is a chronic vasculitis of medium and large vessels. The most involved vessel is the aorta and its major branches. The disease is primarily seen in young women. The described incidence of the disease ranges from 0.3 to 3.3 million per year. The vessels are characterized by mononuclear infiltration and granulomatous inflammation of vascular media, which leads to arterial wall thickening with stenosis, occlusion, and aneurysmal dilation. Here we present a case of Takayasu's arteritis in a 58 year-old woman who presented with fever and rashsince 1 month. . Early diagnosis and treatment are warranted. When the disease is dormant, the outcome seems favourable.

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INTRODUCTION

Takayasu is a rare kind of chronic inflammatory vasculitis that mainly affects Asian women under the age of 40. The prevalence mentioned varies between 4.7 and 360 instances per million.1 The exact etiology is assumed to be a cell-mediated inflammatory process within the vasculature, which can result in occlusion, aneurysmal dilatation, and constriction in afflicted segments because of mononuclear and granulomatous infiltrates, which causes a variety of symptoms.2 During the disease's acute phase, patients may also have symptoms such as limb weakness or pain, headaches, syncopal attacks, and uneven blood pressure. Fever, weight loss, and exhaustion are examples of constitutional symptoms that may occur first.

CASE REPORT

A 58-year-old woman who experienced fever since 1 month and lightheadedness was hospitalized at our hospital. Initially she had only low grade fever with rashes ; but, as time went on, there were increase in grade and frequency of fever. She also expressed concerns about myalgia, decreased appetite. Physical examination revealed a Blood pressure of 110/70 mmHg . Her body temperature was 100 degree F, and her heart rate was 110 beats per minute. Exams of the chest and precordial areas were clear. Trans-thoracic echocardiography, Low haemoglobin levels, an increased erythrocyte sedimentation rate, and HIGH levels of C-reactive protein are all positive laboratory findings. Blood cultures, protein electrophoresis, laboratory tests for autoimmune serological results all came back negative. PET SCAN was carried out suggestive of AORTITIS .Consequently, it was determined that the patient had takayasu arteritis in an active phase.

DISCUSSION

After the Japanese ophthalmologist MikitoTakayasu, who first documented a case in 1905, Takayasu arteritis is so named.The aorta, its major branches, the coronary and pulmonary arteries, as well as other big and medium-sized vessels, are all affected by the chronic inflammatory vasculitis known as Takayasu. Because of the frequent obstruction of big arteries coming from the aorta, it is also known as a pulseless condition or occlusive thromboaortopathy. The exact pathophysiology is unknown. However, pan arteritis, which has substantial intimal hyperplasia, medial and adventitial thickening, infiltration of mononuclear cells, and occasionally giant cells, is thought to be the cause.It is mostly observed in Asian-descent women, peaking in the 30s. Takayasu illness affects 2 in 10,000 individuals annually, with a male to female ratio of 8:1.6 Takayasu's national data are still not available, though.

In the case study done by Japanese, the 20 year old asian female patient presented with frequent syncopal attacks and lightheadedness. In our case Patient only had fever since 1 month. Depending on the vessels involved, the takayasu disease can manifest clinically in a variety of ways. It typically begins with constitutional symptoms like fever, weight loss, claudication, and fatigue, and then progresses to other symptoms like weakness, lightheadedness, dizziness, high blood pressure, retinopathy, aortic regurgitation, vascular bruits, neurological symptoms like seizures and syncope, etc., depending on the occlusion caused by the inflammatory infiltrates. In almost 20% of instances, neurological symptoms are present.8 vessels were involved in the distribution of involvement. Three out of the six criteria listed above have a sensitivity of 90.5% and a specificity of 97.8% for diagnosis. The conditions atherosclerotic, inflammatory, infectious, and genetic that affect the major arteries are included in the differential diagnosis of Takayasu disease. Examples include atherosclerosis, fibromuscular dysplasia, TB, and giant cell arteritis. Acute phase reactants like ESR and CRP also provide additional evidence in favor of the diagnosis. The mainstay of treatment is expected to Be systemic glucocorticoids and immunosuppressants, which are believed to reduce inflammation and limit the development of the illness.If irreversible arterial stenosis develops due to conditions such cerebral ischemia, hypertension with critical renal artery stenosis, extremity claudication, or both, surgical intervention (endovascular) may be required.To avoid problems, surgical intervention is typically discouraged during active disease and advocated during quiescent disease. This case study is one of the few studies performed on the subject of takayasu's arteritis as the disease is rare and mostly affects East Asian women under the age of 40. It is recommended that the patient of takayasu's arteritis must be observed for long-term, even after being discharged from the hospital. Takayasu's arteritis mainly affects large vessels and its branches. However, all the large vessels are not affected at once and the symptoms are in correspondence with the vessels affected. As seen in the case, there was a significant narrowing of right as well as left subclavian artery, and the patient was present with headache, dizziness and syncopal attacks. The patient experienced dizziness before sporadic syncope, which is because there was significant narrowing of aorta and its branches causing blood pressure discrepancy.

Conflict of Interest: **None.**

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