



A CASE REPORT OF TAKAYASU'S ARTERITIS PUBLICATION

Dr. Hiral Kucha Second Year Resident, Department of General Medicine.

Dr. Brinda Mevada Assistant Professor, Department of General Medicine.

Dr. Zalak Gadani Associate Professor, Department of General Medicine.

ABSTRACT Takayasu's arteritis is a rare, idiopathic, chronic inflammatory disease with cell-mediated inflammation, involving mainly the aorta and its major branches. It leads to stenosis, occlusion or aneurysmal degeneration of large arteries. The clinical presentation is characterised by an acute phase with constitutional symptoms, followed, months or years later, by a chronic phase in which symptoms relate to fibrosis or occlusion of vessels. Angiography is the gold standard for diagnosis and for topographical classification and it correlates with symptoms and prognosis.

The prevalence is 2.6-6.4 persons per million population(1). Any discrepancy in terms of pinpointing the prevalence is attributed to genetic factors and difficulty in diagnosis.

KEYWORDS :

INTRODUCTION

Takayasu's arteritis (TA) is a granulomatous, large vessel vasculitis with a preponderance for young women. The inflammation results in disruption of the arterial endothelium causing stenosis, endoluminal thrombosis and aneurysmal dilatation.

Case Report

History

A 30-year-old female from presented with headache, arthralgia, malaise, poor appetite and bilateral lower limb claudication for 7 days duration. It was not associated with chest pain or palpitations.

She complained of arthralgia involving all small and large joints indiscriminately without any signs of inflammation. She did not give a history of fever, chills or rigors, drenching night sweats or weight loss. She denied cough, difficulty in breathing, chest pain, visual disturbances, photophobia, or photosensitive rashes. She also did not have cold intolerance, constipation, menorrhagia, polyuria or polydipsia.

She does not have any significant past history.

She have normal menstruation cycle with duration of 30 days.

She have non significant family history.

Examination

General Examination

Pt's height was 144 cm and she weighed 52 kg with a body mass index of 25kg/m². She was not febrile or pale and there was no hair loss, rashes, oral or genital ulcers. She did not have redness in the eyes. Her radial, ulnar pulses were barely felt in the right arm, whereas in the left arm, brachia and ulnar pulses are not palpable. On bilateral lower limb all pulses starting from femoral, popliteal, deep peroneal and anterior tibial arterial pulses are not palpable. Blood pressure was 190/50 mmHg on right upper limb and 100 mmHg Systolic on left upper limb. The carotid pulses were palpable and there was bruit present on bilateral carotid artery.

Pt had no signs of pallor, icterus, clubbing, cyanosis, pedal edema or lymphadenopathy.

Systemic Examination

- Respiratory system-bilateral lung field clear on auscultation.
- Cardiac examination-S1 S2 audible with no murmur.
- CNS examination-unremarkable
- Per abdomen-soft, non tender

Investigation

- Lab investigation
- Cbc of patient was normal, with esr 42/1st hour. Pt had normal renal function test, liver function test, thyroid function test. Calcium was 9.2

- And patient had negative anti nucleic antibody and negative cytoplasmic and perinuclear Antineutrophil Cytoplasmic Autoantibody

Radiological Investigation

- Patient's chest xray was normal and spine xray was normal and Computed tomography aortogram-Circumferential thickening of wall of aorta with significant narrowing suggestive of takayasu's arteritis type-5

Dimension Of Aorta And It's Different Branches On Ct Aortogram.

	Diameter
Ascending aorta	27mm
Arch of aorta	19mm
Descending aorta after aortic isthmus	15mm
Right renal artery at origin	4.6mm
Left renal artery at origin	4.4mm
Celiac artery	6.6mm
Superior mesenteric artery	5.2mm
Inferior mesenteric artery	2.8mm



- Figure showing significant narrowing of all branches of aorta s/o Takayasu's arteritis type 5

Treatment

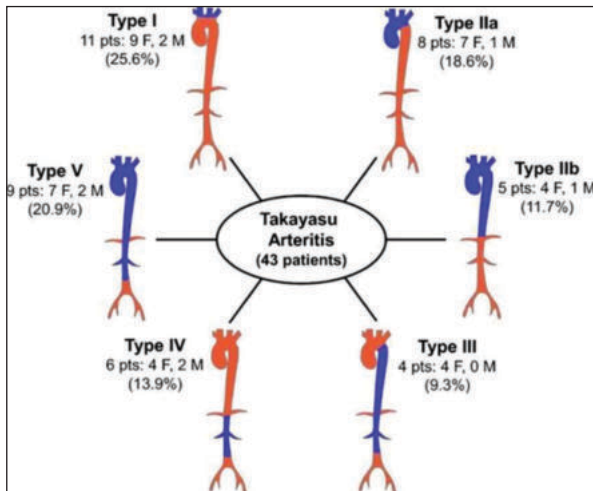
- Pt treated with tab. methyl prednisolone in dose of 1 mg/kg for 1 month
- Pt also treated for hypertension with anti hypertensive medication
- Pt was advised to give follow up visit regularly.

DISCUSSION

- TA is an autoimmune, chronic, granulomatous vasculitis involving the large arteries. Inflammation of the endothelium causes stenosis, thrombosis, luminal occlusion and aneurysmal dilatation [2]. TA has a preponderance for females, accounting for over 90%

of the cases. The incidence of TA is highest in the fourth decade [6]. The etiology of TA has not been fully understood but a genetic basis has been described. Certain infections, particularly *Mycobacterial tuberculosis* has been linked to the pathogenesis of TA [1].

- Early symptoms include headaches, fever, weight loss, myalgia, and arthralgia. Hypertension is common, which occurs in 80% of cases due to stenosis of the renal arteries resulting in activation of renin- angiotensin- aldosterone system [1]. The classic features of TA such as limb claudication, carotid or subclavian arterial bruits and end organ ischemia, which usually occur as the disease progresses.
- TA is a chronic disease with a relapsing course [1]. Although the symptoms improve with glucocorticoid therapy, they tend to relapse once the dose is tapered off. Relapses have continued to occur in at least 50% of patients despite adjuvant immunosuppressive therapies or surgical revascularizations [6, 15].
- TA is a granulomatous large vessel vasculitis with nonspecific symptoms at the outset, which can be easily overlooked. Unilateral clubbing is an extremely rare manifestation of TA. Therefore, detection of unilateral clubbing should raise a strong clinical suspicion of TA, with prompt diagnosis and initiation of treatment.



• Figure showing types of takayasu's arteritis

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