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TAKAYASU ARTERITIS COMPLICATING PREGNANCY

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Abstract : Takayasus arteritis (TA) is a rare inflammatory disease of the arteries that affects women of childbearing age.(3) It is always a challenge for the obstetrician to manage pregnancy in such cases. We are presenting a case of 25 year old primigravida with 39 weeks of gestation with feeble radial pulse and hypertension , finally diagnosed as Takayasus arteritis and managed without complications.

Keyword : Takayasus arteritis, young female arteritis

Introduction: Takayasu's arteritis (TA) is an inflammatory disease which often affects the ascending aorta and aortic arch, causing obstruction of the aorta and its major arteries. It is a rare chronic vasculitis of unknown etiology, first described in 1908 by the Japanese ophthalmologist Mikito Takayasu. (3) Women are affected in 80–90% of cases with a mean age of presentation in the second and third decade of life. It is more predominant among females than males, with the ratio of M:F =1:8.5.,and therefore known as ''young female arteritis''.(2) Due to the manifold cardiovascular complications that can occur in the course of the disease, management of pregnancies in Takayasu's arteritis patients is difficult for the obstetrician.

CASE REPORT:

A 25 year old Mrs.P, was referred from Primary Health Centre as a case of primigravida with 39 weeks of gestation with feeble radial pulse and with blood pressure 150/90mmHg .It could be the lower limb blood pressure which was not clearly stated in the referral form. Patient had complaints of abdominal pain. she had no history suggestive of imminent eclampsia. Patient also gave history of numbness of both upper limbs and lower limbs on & off since 17 years of age. General examination, abdomen and bimanual pelvic examination was done and she was in latent phase of labour. Examination of peripheral pulses revealed absent radial and brachial artery pulses on both upper limbs. Upper limb blood pressure could not be recorded in both the sides. Lower limb blood pressure recorded in our hospital - Right lower limb:150/90 mm Hg; Left lower limb:150/90 mm Hg. Cardiovascular system and respiratory system were found to be normal. Central nervous system examination was unremarkable. Fundus examination was normal. Investigations revealed mild anemia. Urine examination showed no proteinuria. Her blood sugar, Renal function and liver function test were normal. C-reactive protein was elevated. Prothrombin time, aPTT, Anti nuclear antibody, anti-cardiolipin antibody, lupus anticoagulant, RA factor were found to be negative. Doppler study revealed, absent flow in radial and brachial arteries in both upper limbs with bruit in right subclavian artery. Echocardiogram revealed Left subclavian artery occlusion at its origin, flow into left common carotid artery and innominate arteries unobstructed, descending thoracic aorta shows laminar flow with Ejection fraction 74%, with normal left ventricular function. With the above clinical findings she was diagnosed to have Takayasu's Arteritis. She was started on antihypertentives and steroids , planned and taken up for elective LSCS in view of high risk of pulmonary edema and cerebral hemorrhage during second stage of labour. Her intraoperative period was uneventful .Her blood pressure was monitored regularly and kept in control. Postoperatively , patient had headache on second post operative day and was evaluated. CT BRAIN showed normal study. Headache subsided with adequate fluids and analgesics. Otherwise postoperative period was uneventful. She was discharged and advised to continue Tablet Prednisolone 10 mg in the morning and Tablet Aspirin 75mg once a day , counselled regarding suitable temporary methods of contraception and suggested to follow up with rheumatologist & vascular surgeon. Postnatally she had developed numbness of both upper and lower limbs and muscle pain on exertion , She was advised to continue Tablet prednisolone , Tablet Aspirin 150mg ½ od, Tablet Calcium 300mg tds, Tablet Vit D 0.25mg od. Since she didn't respond to steroids alone , she was started on tablet methotrexate 2.5mg 4 times/wk along with T.Folic acid 5mg daily after six months of exclusive breast feeding.

DISCUSSION:

As the incidence of Takayasu's arteritis during childbearing years is relatively high, the management of pregnancies with this disease is of great importance in clinical obstetrics. Hypertension occurs in 32% to 93% of patients with Takayasu's arteritis , as seen in our case. According to the American Society of Rheumatology (1990) classification criteria(1) ,the points

favourable for Takayasu's Arteritis,in our patient are ,young female patient with absent upper limb pulse, with subclavian bruit, presenting with numbness and claudication and echocardiogram showing occlusion of left subclavian artery at its origin ,as subclavian artery is involved in about 93% of patients with Takayasu's arteritis. The disease is divided into two stages, Systemic stage and Occlusive stage.(1)Our patient was in occlusive stage with vascular symptoms like claudication. As she did not develop complications like Ischemic retinopathy, severe hypertension, aortic insufficiency, aortic aneurysm, she was classified as group 1 with no evidence of complications. As glucocorticoids are the mainstay of treatment , patient was started on Tablet prednisolone . The differential diagnosis includes coarctation of aorta, arterial thrombosis, systemic lupus erythematosis. Takayasu's Arteritis does not affect the fertility of the patient adversely and pregnancy does not exacerbate the disease or the inflammatory activity and the hemodynamic status may improve with pregnancy. Preconceptional counseling should be given to stop cytotoxic drugs before conception. ESR is used to monitor disease activity and response to treatment. Surgical intervention is carried out after active disease has been controlled with medical therapy.

CONCLUSION:

Takayasu's arteritis during pregnancy has been associated with favorable maternal and fetal outcomes for unknown reasons. Medical management of a pregnant patient with Takayasu's arteritis does not differ significantly from a non-pregnant patient. Multidisciplinary management is essential for satisfactory clinical outcome during pregnancy . Close monitoring improves the perinatal outcomes in patients with Takayasu's arteritis who are more prone to develop hypertension, preeclampsia and IUGR.(4) Early steroid treatment , stable condition at presentation are factors which favours the prognosis of the patient.

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