

# TAKAYASU'S DISEASE IN PREGNANCY

by

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Takayasu's disease also known as Aortic arch syndrome is one of the very rare medical disease associated with pregnancy. Its association with pregnancy has been reported only thrice in the world literature. It is named after the Japanese ophthalmologist who for the first time noticed fundoscopic findings of the disease.

## CASE REPORT

Mrs. L., 32 years Hindu para 2 was admitted in Umaid Hospital, Jodhpur on 18-10-78 with history of amenorrhoea of 9 months, labour pains since 3 a.m. on 18-10-78 and leaking membranes since 9 a.m. Her menstrual cycles were normal. Her last date of menstrual period was 6-1-78 with calculated expected date of delivery 13-10-78.

## OBSTETRICAL HISTORY

Para 2 + 0, 1 living, last female childbirth 10½ years ago; patient was using conventional contraceptive methods.

## PAST HISTORY

No history of rheumatism, joint pains, syn-copal attacks, cerebral insufficiency supine hypotension syndrome, Rhanauds phenomenon in upper extremities and any symptom and sign of cerebro-branchial vasuclar occlusion.

## FAMILY AND PERSONAL HISTORY

No familial and personal history of syphilis, tuberculosis, diabetes, hypertension, heart disease, autoimmune diseases like rheumatoid arthritis, polyarteritis nodosa, lupus systemic erythematosus etc.

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## GENERAL PHYSICAL EXAMINATION

There was mild anemia, but no oedema, cyanosis, lymphadenopathy or jaundice. The pulse was not perceptible in both upper extremities. The blood pressure was not recordable in upper extremities. In both lower extremities B.P. was 106/60 mm Hg. Heart sounds were normal. There was a systolic bruit heard over right carotid artery. Liver and spleen were not palpable.

## ABDOMINAL EXAMINATION

The uterus was enlarged upto 38 weeks of gestation and was contracting moderately. A single foetus was presenting as vertex in LOA position with good foetal heart sounds.

Vaginal examination revealed cervix completely taken up, soft, 1/5th dilated and intact membranes, vertex was presenting at the level of ischial spines. Pelvis was adequate.

## LABOUR DELIVERY AND PUERPARIUM

She had uneventful, prophylactic, outlet forceps delivery. A male child with Apgar score 10/10 and weight 7½ lbs. was delivered. She had no P.P.H. Placenta was normal on examination. Puerparium was uneventful and she was discharged on 6th day. Rest of the puerparium was also healthy.

## INVESTIGATIONS

She was regularly coming to ante-natal clinic and during that period following investigations were carried out:

Hb. 78%, Urine N.A.D., X-Ray chest N.A.D., E.C.G. TWNL., Fasting blood sugar 88 mg%, blood urea 20 mg%, Kt-ve, 'B' Rh + ve, group, T.L.C. 9400/cc, D.L.C.-P 82%, M 4%, E 1%, L 13%, E.S.R. 49 mm 1st hr., Fundoscopy showed albinoid fundus with narrow retinal vessels.

## ETIOPATHOLOGY

The previous clinical and serological datas



have suggested some relationship to systemic lupus erythematosus, rheumatoid disease, poly arteritis nodosa etc. In spite of a histopathological resemblance to syphilitic panarteritis, serological and clinical evidences of syphilis are absent. In this, histologically a panarteritis is found during active stages of the disease, in late stages fibrous scarring, intimal proliferation and thrombosis result in occlusion of major vessels arising from arch of aorta.

#### CLINICAL FEATURE

The constitutional symptoms occur during prepulseless period of disease. This is progressive disease and depending upon the arterial occlusion, patient (women are predominately involved) suffers from cerebral, brachial and ophthalmic ischaemic symptoms and signs including headache, syncopal attack, hemiplegia, hemiparesis, hemianopia, premature cataracts and Rhanuads phenomenon, ulceration of nose, speech disorders. There is hypotension in upper half of the body and hypertension in lower half; this has given rise to the term "Reversed coarctation". Disease may progress to involve coronary, renal blood vessel, leading to cardiovascular accident. Diagnosis of the disease is usually coincidental when radial pulses are not palpable in normal young female. Confirmation and localization of the lesion is accomplished by aortography. For control of this disease, corticosteroid therapy, excision and graft replacement are used to some extent with a relatively poor outcome.

#### REVIEW OF LITERATURE

Siuranza (1962) reported the first case. The patient had uneventful normal confinement and he commented that he had no problem in managing the case except recording the pulse and blood pressure. He also advised that such patients should be advised not to smoke as the disease has similarity to thromboangitis obliterans.

The same case was followed for ten years and in her last confinement she had dyspnoea, fatigability and dizziness. She was advised for termination of pregnancy but she refused. She was kept under strict medical obstetrical observation. She developed no further insufficiency except midtrimester U.T.I., oedema and machinery murmur, low pulmonary second sound. She was delivered of a normal 7 pounds male infant.

Szinnyai and Balogh reported the successful delivery of an infant by L.S.C.S. in patient with Takayasu's syndrome.

#### Discussion

Medical literature is full of information regarding the disease but in obstetrics its incidence, effect and course is not yet well established. Pregnancy is an extra load on the maternal haemodynamics. The vascular insufficiency particularly cerebral, cardiac and ophthalmic may develop during stress of labour as gravid uterus pressing over inferior vena cava can cause hypotensive syndrome, lower body hypertension leading to oedema, varicose veins, accidental haemorrhage, etc. As B.P. is not recordable easily, diagnosis of toxæmia, peripheral circulatory failure may be unnecessarily delayed. Corticosteroid therapy may have its effect on outcome of pregnancy. Hence, such patients should be kept under strict observation. They should be nursed in left lateral position and immediate treatment should be started if any vascular insufficiency like other cardiovascular disease develop. She should be advised to complete her family at an earlier age and preferably oral contraceptive pills should be avoided.

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