Volume : 3 | Issue : 12 | December 2014 • ISSN No 2277 - 8179

Research Paper

Medical Science

KEYWORDS : Takayasu's arteritis, Pregnancy, Femoral artery catheterization

Pregnancy in a Patient With Takayasu's Arteritis

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ABSTRACT

Takayasu arteritis is a nonspecific chronic inflammatory vascular disease of unknown etiology with a higher incidence during the child-bearing years. It primarily involves the aorta, its main branches such as the brachiocephalic, carotid, subclavian, vertebral and renal arteries, as well as the coronary and pulmonary arteries. Most of the patients became the pregnant as being already diagnosed with this disease and being on medication. It has been suggested that pregnancy, although not usually associated with an exacerbation of inflammatory vascular lesions, should only be considered during a phase of remission. Hypertension is probably the most serious major complication that can develop, possibly leading to intrauterine growth retardation, maternal heart failure, and fetal haemorrhage. We describe a case of pregnant woman with a 2-year history of Takayasu's arteritis who had bilateral subclavian artery obstruction. She stopped to take colchium dispert, lanzedin, imuran and took only prednol 16 mg throughout the pregnancy. She underwent a planned cesarean section under epidural anesthesia at 38 weeks and 1 day of gestation, and a healthy female baby girl 2830 g was delivered. Before the cesarean section, in order to monitorization the vital findings, a right femoral artery catheterization was performed. There were no postpartum complications.

INTRODUCTION

Takayasu arteritis is a nonspecific chronic inflammatory vascular disease of unknown etiology with a higher incidence during the child-bearing years. It primarily involves the aorta, its main branches such as the brachiocephalic, carotid, subclavian, vertebral and renal arteries, as well as the coronary and pulmonary arteries. Most of the patients became pregnant as being already diagnosed with this disease and being on medication. It has been suggested that pregnancy, although not usually associated with an exacerbation of inflammatory vascular lesions, should only be considered during a phase of remission (1-3).

The management of this disease is of great importance for the clinical obstetrician who must be aware of the clinical symptoms and signs as well as the dynamics of such pregnancies. The consequences of uncontrolled cases can be catastrophic, as severe maternal and fetal complications may occur. Maternal complications may include preeclampsia, renal dysfunction, congestive heart failure, cerebrovascular accidents, or even death. Spontaneous abortion, preterm labor, placental abruption, and growth retardation may affect the fetus. Considering these complications, if it is possible, medical care should be started preconceptually, especially in patients with established diagnosis, in whom control of the disease is mandatory (4).

In this report, we describe a case of pregnant woman with a 2-year history of Takayasu's arteritis who had bilateral subclavian artery obstruction.

CASE REPORT

A 29-year-old multigravida (G:4, P:2, D/C:1) with Takayasu arteritis diagnosed 2 years ago applied to Kahramanmaraş Sütçü İmam University, Medical Faculty, Department of Obstetrics and Gynecology for antenatal care at 38 weeks of gestation. The disease was under control and the patient stopped to take colchium dispert, lanzedin, imuran and took only prednol 16 mg throughout the pregnancy. For monthly antenatal cares she had went to Obstetricians and Gynecologists at in Elbistan and Elazığ. She had undergone a caesarean section due to breech presentation in her previous pregnancy. The ultrasound scan indicated slightly impaired growth (BPD:37+2 weeks, AC:35+1 weeks) and an amniotic fluid index of 6 cm. The Doppler studies (umbilical artery S/D: 2.31) as well as a cardiotocography were normal, and so was the biophysical profile. Her blood pressure was measured as 200/100 mm-Hg, but proteinuria was (-) at the urine examination. Because she had bilateral subclavian artery obstruction, before the cesarean section, in order to monitorize the vital findings, a right femoral artery catheterization was performed. She underwent a planned cesarean section under epidural anesthesia at the the same day and a healthy female baby weighing 2830 g was delivered. The puerperium was uncomplicated for both the mother and fetus.

DISCUSSION

Takayasu arteritis is a nonspecific chronic inflammatory (giant cell) vascular disease of unknown etiology. It is a systemic disease with generalized as well as local symptoms. It usually involves the branches of the aortic arch, and ischemia can lead to absent pulses and end organ failure during the acute phase of the disease (4). In our patient, there was bilateral subclavian artery obstruction, so the arterial pulses from the upper extremities could not be taken. For monitorization of the vital findings, right femoral artery catheterization was performed before the operation.

Since the incidence of Takayasu arteritis during the childbearing years is relatively high (median age 25 years, up to 97% more common in females of Asian origin) (1), the management of pregnancies with this disease is of great importance in clinical obstetrics. However, most of the pregnant women affected by the disease will be already diagnosed and will be on medication when became pregnant (1), as the patient in this case report. This was the 4th pregnancy of our patient, but she had 1 living child (7 years old, girl). The diagnosis of Takayasu's arteritis was

Volume : 3 | Issue : 12 | December 2014 • ISSN No 2277 - 8179

2 years ago. So, in her previous 3 pregnancies, the disease was not known.

The state of disease in early pregnancy is a definitive factor in determining the management (5). Thus the pre-pregnancy counseling and medical management of the disease is very important. Most frequently, the management involves low-dose prednisolone (1 mg/kg) and interruption of azathioprine, if used, until delivery (6) . In our case, colchium dispert, lanzedin, imuran were stopped and she took only prednol 16 mg throughout the pregnancy.

A spontaneous abortion can occur, if the disease is not well controlled (7). Our case had 2 abortions before the diagnosis of disease that may be due to Takayasu's arteritis.

Maternal complications during the course of the pregnancy include sustained hypertension, superimposed preeclampsia, congestive heart failure, and progression of renal insufficiency (8). In our case, the measured arterial pressure was 200/100 mmHg but there was no proteinuria in the urine sample. When we asked about the course of pregnancy, she said that everything was good and no complication occured. Also, the puerperium was uncomplicated for both the mother and fetus.

In conclusion, well-monitored pregnancies with uncomplicated Takayasu arteritis are safe for the mother and for the baby to be born.

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