

ATRIAL MYXOMA IN PREGNANCY

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ABSTRACT

This is a case of a left atrial myxoma diagnosed at an advanced gestation. The patient was delivered by urgent caesarean section with resection of the myxoma on the following day. The clinical dilemmas were mode of delivery, timing of cardiac surgery in relation to delivery and managing postpartum bleeding.

CASE REPORT

A 36 year old indigenous female G7P6 was transferred at 39+2 weeks with a suspected left atrial myxoma found on transthoracic echocardiogram (TTE) during investigation of new onset dyspnoea and murmur. Her obstetric history was relevant for six uncomplicated term vaginal deliveries. Her pregnancy had been uneventful, only complicated by a BMI of 35 and iron deficiency anaemia.

An ECG showed normal sinus rhythm. Formal TTE confirmed a 4 x 1 cm mobile echo-dense mass arising from the interatrial septum prolapsing through the mitral valve during diastole. The left ventricular ejection fraction (67%) and valvular function were normal.

MANAGEMENT

After discussion between cardiologists, cardiothoracic surgeons, obstetricians and anaesthetists, a decision was made to perform a caesarean section with a view to proceed with cardiac surgery once the patient was stable. She underwent an uncomplicated caesarean section with bilateral tubal ligation under general anaesthetic, combined with a transthoracic echocardiogram.



On day 1 post Caesarean section, a hemisternotomy was performed with 30,000 units of IV heparin for cardiopulmonary bypass. A left atrial mass was resected from the interatrial septum and the defect was approximated with a patch. Histology was consistent with a benign cardiac myxoma (Figure 3). She had an unremarkable recovery, and was discharged on day 5 post cardiac surgery.

DISCUSSION

Atrial myxomas are the most common benign tumour of the heart. Examination may reveal systolic or diastolic murmurs, depending on the location, size and mobility of the myxoma. Pregnancy, being a hypercoagulable state, may increase the risk of embolization. Once a diagnosis of myxoma is confirmed, prompt resection is required due to the unpredictable risk of embolisation, mitral inflow obstruction or cardiovascular events, including sudden death. In this case the clinical dilemmas were:

1. The mode of delivery
2. Timing of the cardiac surgery in relation to delivery (one or two staged)
3. Managing post-operative bleeding in the setting of high dose heparin required for cardiac surgery.

Cardiac surgery in early pregnancy has a reduced maternal risk but more fetal risks, mainly due to the effects of cardiopulmonary bypass. Delay in cardiac surgery increases the risk of embolisation and maternal sudden cardiac death.

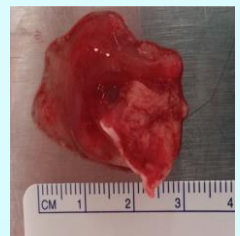
A literature review showed most myxomas in pregnancy were mostly diagnosed early, making this case unique.

- 7 cases had early termination of pregnancy
- Out of 26 reported cases with either caesarean section or vaginal delivery;
- 20 were uncomplicated, 4 were complicated and 2 died.

Neonatal outcome was not different between modes of delivery.

CONCLUSION

This case was managed with urgent Caesarean section and subsequent surgical resection of the myxoma via open heart surgery in a two staged procedure. Physicians should be vigilant to any new onset maternal heart murmurs during pregnancy, and have a low threshold to screen with TTE. Comprehensive multidisciplinary collaboration is essential to optimize fetal and maternal outcomes.



References: Reynen K (1995) Cardiac Myxomans N Engl J Med 333: 1610-1617
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