SUCCESSFUL PREGNANCY IN A PATIENT WITH EBSTEIN'S ANOMALY

by

A. K. GUPTA,* M.B.,B.S., M.D.
P. PORWAL,** M.B.,B.S.
K. PORWAL,** M.B.,B.S.
M. R. GAGRANI,** M.B.,B.S.
and
N. K. NUWAL,** M.B.,B.S., M.D.

Introduction

The incidence of Ebstein's anomaly in the general population has been estimated as 1 in 210,000 or less than 1% of all the congenital heart defects and it has an equal sex ratio (Keith *et al*, 1958). Successful pregnancy in a patient with Ebstein's anomaly is uncommon (Copeland *et al*, 1963). Here we report a case of successful pregnancy in a women with Ebstein's anomaly.

CASE REPORT

This patient, a 22 year old woman, had first been referred 4 years back for a cardiac murmur. There was no history of rheumatic fever. Physical examination at that time showed a well developed young girl, with no cyanosis or clubbing. On auscultation third and fourth heart sounds were present, while the first sound was split and diminished in intensity. There was wide fixed splitting of second heart sound. A long pansystolic murmur associated with a thrill was best heard in the third and fourth left intercostal space parasternally together with a superficial scratchy diastolic murmur. The heart rhythm was regular and the arterial pulse was normal. Jugular venous pressure was not raised and blood pressure was 110/60 mm of Hg. Other systems were normal. Electrocardiogram showed complete right bundle branch block with a prolonged P-R interval. Roentgenologic studies revealed a large heart. A diagnosis of Ebstein s anomaly was made.

Two years back a 10 week pregnancy was terminated because of the diagnosis of Ebstein's anomaly, though she was symptom free.

When seen this time she was 12 weeks pregnant and anxious to have the baby. The pregnancy was allowed to continue. Close supervision was maintained throughout the pregnancy. The patient remained symptom free apart from some ankle oedema which quickly settled wih rest in bed. No cardiac drugs were required. At 36 weeks she went in to spontaneous labour and was delivered of a healthy female infant weighing 2500 grams. The patient remained symptom free throughout parturition. Antibiotic prophylaxis was given from the onset of labour for one month.

Discussion

Though the average life expectancy of a patient with Ebstein's anomaly is 25 to 30 years, there exist a wide spectrum of severity. Adams and Hudson (1950) reported survival to the age of 79 years in a woman. In the combined series of Mayer *et al* (1957), Vacca *et al* (1958) and Schiebler *et al* (1959) there were 62 female patients with Ebstein's anomaly, half of these could be regarded as being,

*Presently Lecturer in Medicine, R.N.T. Medical College, Udaipur.
**J.L.N. Medical College, Ajmer.
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or having been, of child bearing age but there was no mention of pregnancy in any of these women. Copeland *et al* (1963) studied 103 women with congenital heart disease who had a total of 372 pregnancies, 3 of these women had Ebstein's anomaly with a total of 6 pregnancies.

The likeliest reasons for such women not having children are the severity of their symptoms or medical advice against starting or perhaps continuing, a pregnancy. Our patient had one pregnancy terminated because of her heart lesion even though she was symptom free at the time. There are several possible hazards during pregnancy in this condition. Cyanosis, if present, leads to a high incidence of spontaneous abortions (Wooley *et al*, 1961; Cope Land *et al*, 1963) or if born live, the offspring of a cyanotic mother tends to be smaller and less robust than a normal child. The presence of pulmonary hypertension also increases the risk of foetal death (Wooley *et al*, 1961). Congestive heart failure and sudden collapse with no obvious cause are the commonest causes of death in Ebstein's anomaly. The increased circulating blood volume during pregnancy may precipitate heart failure, while severe exertion, and possibly anaesthesia, during labour may produce sudden death. The risk of death from paradoxical embolism is greater during pregnancy because of the higher incidence of thromboembolic disease. A relatively good prognosis in our case is indicated by the absence of cyanosis, cardiac failure, and arrhythmias either before or during pregnancy.

This case report suggests that women with Ebstein's anomaly should be carefully assessed before advising them against starting or terminating a pregnancy, since a successful outcome may be achieved.

Summary

A case is described of a successful pregnancy in a woman with Ebstein's anomaly. It is suggested that careful assessment should be made before advising against starting or terminating pregnancies, since successful outcomes are possible.

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