

## CHORIOANGIOMA OF PLACENTA - A CASE REPORT

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### SUMMARY

A case of a large chorioangioma present in one out of 120 placentae of still births is reported. It was present in a twin pregnancy and was associated with placental abruption, retroplacental clot, antepartum haemorrhage and intrauterine death at 33 weeks gestation. Autopsy examination of both fetuses revealed features of intrauterine asphyxia.

**Key Words:** Chorioangioma, Placental abruption, Antepartum haemorrhage.

### INTRODUCTION

With rare exceptions, vascular tumours are reported to be the only benign tumours of placenta<sup>1</sup>. Other tumourous conditions seen in the placenta include remains of aborted (vanished) twins, teratomas and hydatidiform mole. In a study of 120 placentae of still births delivered at the Korle Bu Teaching Hospital between November 1991 and March 1992, a case of chorioangioma was present and is the subject of this report. Firstly to add to the literature as recommended by Wallenburg<sup>2</sup> in his review article and to create awareness of the existence of this condition in our environment because of the associated pregnancy and fetal complications.

### CASE REPORT

A 33 year old lady I.B., para 3+0 who is a trader started antenatal attendance at 21 weeks of gestation. The pregnancy was uneventful except for malaria she developed at 24 weeks of gestation. She was adequately treated. An ultrasound examination was requested by her obstetrician but she did not un-

dertake the examination. The reason for which the ultrasound examination was requested was not stated and she did not know either. At 33 weeks gestation she was seen at the outpatient department with the complaint of bleeding per vaginum. There was no history of trauma or unusually vigorous activity. After examination, a diagnosis of placental abruption was made. An emergency Caesarean section was done and two fresh male still born fetuses were delivered. One weighed 1.2 kg and the other 1.6 kg.

### Pathological Findings

The placenta which was monochorionic monoamniotic weighed 500 gms and measured 19 x 12 x 3 cm. There was a blood clot weighing about 100gms on the maternal surface overlying a well circumscribed paracentric reddish mass measuring 6 x 5 cm. It was bulging on the fetal surface of the placenta. The mass was initially thought to be a haemorrhagic infarct.

Histological examination of the placental mass revealed a growth composed of proliferation of fetal blood vessels of capillary type — chorioangioma (fig. 1). The other placental pathology present elsewhere was increased intervillous fibrin.

Autopsy examination of both fetuses revealed features of intrauterine asphyxia which were pleural, pericardial, epicardial and renal subcapsular haemorrhages.

### DISCUSSION

Chorioangiomas are composed of proliferation of fetal vessels that are supported by a cellular connec-

tive tissue stroma. The capillary and stroma can be present in different proportions and also different degrees of differentiation and degeneration. For this reason the tumour has been known by a great variety of names like haemangioma of placenta, angioma of placenta, and chorangioblastoma. Chorioangioma, proposed by Beneke<sup>2</sup> in 1900 is most frequently and widely used. chorioangiomas are thought to be due to excessive proliferation of undifferentiated angioblastic chorionic mesenchyme either in one or more villi or in the cord. Some authors (Davies, Snock and Wilkin)<sup>2</sup> concluded in the light of modern embryology that chorioangiomas arise very early in pregnancy, even as early as the 16th day. It is also possible that the growth can develop in older villi from undifferentiated remnants of angioblastic anlagen.

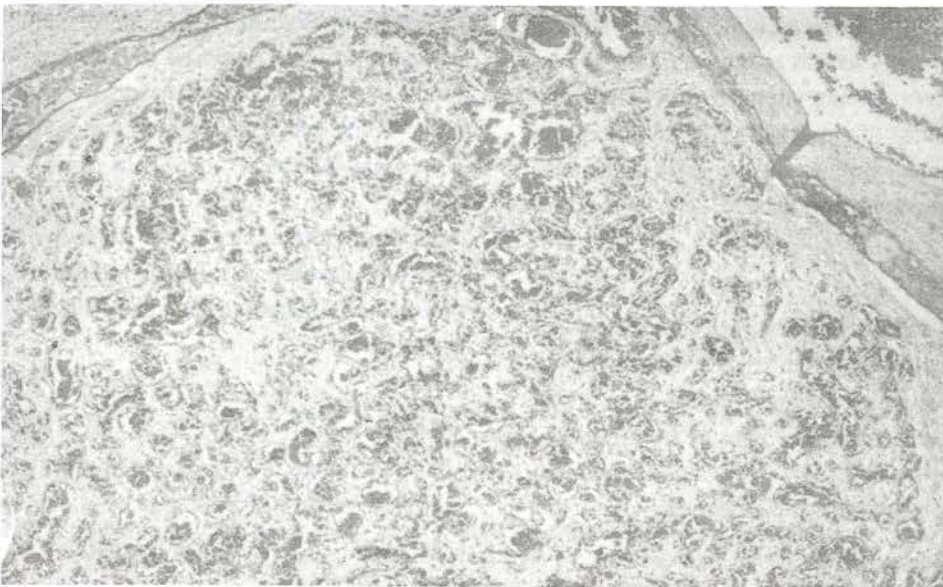
In many early studies<sup>3</sup> a very low incidence of placental chorioangioma is reported varying from 1 in 16000 to 1 in 500 placentae. But Wallenburg<sup>2</sup> reported an incidence of 1 in 117 in his study, a figure which is comparable to what was observed in this study. The incidence may be higher if all placentae of both live and still births were studied. Generally, when the placenta is systematically and carefully examined microscopically instead of looking for gross

suspicious lesions, the incidence is about one per cent<sup>2</sup>.

Hydramnios constitute the most frequently reported clinical complication associated with chorioangioma<sup>4</sup>, occurring in about 18 to 35% of all cases. The association of chorioangioma with hydramnios has been attributed to increased transudation of fluid through the large vascular surface of the tumour which bulges on the fetal surface by Kotz and Kaufman<sup>5</sup>. It has also been likened to arteriovenous shunts in the systemic fetal circulation by Benson *et al*<sup>6</sup>, leading to congestive cardiac failure in the fetus with subsequent hydramnios.

Other complications associated with large chorioangiomas are placental abruption, antepartum haemorrhage<sup>7</sup>, which were present in this case, dystocia<sup>8</sup>, placenta previa and postpartum haemorrhage<sup>8</sup>. Fetal complications reported in association with chorioangioma include fetal bleeding through a ruptured efferent vessel of the tumour, increased fetal mortality<sup>9</sup>, (which may be due to cardiac failure), fetal hydrops<sup>10</sup>, low birthweight and increased congenital fetal malformation<sup>3</sup>. A chromosomal disorder has been suggested as a common determinant of both chorioangioma and congenital malformation<sup>2</sup>.

Figure 1: Chorioangioma of Placenta. There is proliferation of capillary type blood vessels filled with red cells in a loose delicate stroma. H & F (x 20)





A case of chorioangioma of a twin placenta is described leading to abruptio placenta, antepartum haemorrhage and intrauterine death of twin male fetuses. If the patient had had the ultrasound examination the tumour may have been discovered, and the pregnancy could have been monitored more closely. The woman would have been advised on the signs and symptoms of the associated complications and timely intervention could have saved the fetuses. If the importance of the ultrasound examination had been made known to the woman she might have had the examination. In this era of cost benefit medicine information is essential.

It is important that obstetricians look out for the presence of chorioangioma in cases of hydramnios, placental abruption, antepartum haemorrhage, and unexplained fetal distress. If it is present or suspected then regular fetal heart monitoring is important. It is suggested that histological examination of all placentae with "large infarcts" be carried out in order to increase the chances of diagnosing chorioangiomas. Secondly, sonographers should always look out for the presence of this tumour so that obstetricians can anticipate any complications and monitor the fetuses for safe and timely delivery. This will also help to establish the true incidence and associated complications in our environment.

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