

CIRCUMVALLATE PLACENTA

by

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Circumvallate placenta had been considered an anatomic curiosity until Scott (1960) showed it to be of clinical significance. About 7 percent of these placentae were shown to be associated with antepartum haemorrhage. Its etiology still excites interest which is illustrated by the enunciation of at least 12 hypotheses which have tried to explain morphogenesis. The following cases give further support to the theory of repeated marginal placental haemorrhages giving rise to the anomaly and hydorrhoea.

CASE REPORTS

Case 1

J. a 18 year old primigravida was admitted at 36 weeks of gestation because of false labour pains. She had her first check up at 8 weeks of gestation when her pregnancy had been complicated by uterine cramping, vaginal bleeding and white discharge. At that time the case was misdiagnosed and treated for dysfunctional uterine bleeding. Dilatation and curettage by the junior doctor was unsuccessful because the curetted material from the cervix or uterus was considered to be insufficient for any pathological opinion. The patient reappeared for check up 2 weeks after the previous episode for uterine cramping and white discharge. The senior gynaecologist had diagnosed pyometra at that time. The case was admitted under our care. On examination the uterus was positively 12 week's size. The pregnancy test (Pregnosticon) was positive. Following this the pregnancy had been marked by several months of irregular abdominal pain which responded to duvadilan. At 24 weeks

of gestation the patient had slight bleeding for 2 days. The bleeding stopped spontaneously with symptomatic treatment.

On admission, the patient had irregular uterine contractions which subsided after enema. The cervix was tubular. Forty-eight hours after admission the patient had started labour. She delivered a 2.5 kg. male infant who did well throughout the perinatal period. At the time of amniotomy the fluid was clear. The placenta was circumvallate.

Case 2.

N.B. a 30 years old gravida 5, para 4, was admitted at 36 weeks of gestation because of vaginal bleeding for 8 days. Soon after quickening that patient had an episode of vaginal bleeding and white discharge. Following that the pregnancy was marked by regular episodes of vaginal bleeding and white discharge.

On examination the height of the uterus was corresponding to 38 weeks of gestation. The floating cephalic pole of the foetus was presenting in the lower segment. Examination under anaesthesia in the theatre revealed low implantation of the placenta. A male infant weighing 3 kg was delivered by a lower segment caesarean section. The patient had smooth post-operative period. The infant did well throughout the perinatal period. The amniotic fluid was clear. The placenta was circumvallate.

Comments

Our previous observations (in press) of maximal correlation between circumvallation of the placenta and antepartum haemorrhage are concordant with that of Scott (1960) who found that circumvallation has been associated unduly frequently with antepartum haemorrhage but otherwise is of no clinical significance. The bleeding may be painless, intermittent and occasionally excessive to endan-

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ger the life of the foetus. Similarly, Paalman and Vanderveer (1953) found circumvallate placentae associated with bleeding (50%) hydrorrhoea (27%) and intermittent contractions (20%). Keeping in view the observations of these workers it would not be an overstatement to pronounce that circumvallation is the cause of repeated haemorrhages in most of the cases. On the contrary, it may be difficult to prove that in every case circumvallation is the effect of repeated haemorrhages because circumvallation is explained by more than 12 hypothesis and it is not necessary that pre-existing haemorrhage beneath the marginal chorion must occur in every case.

The occurrence of circumvallation in the present cases following repeated small marginal haemorrhages is explained on the basis of repeated clot formation, its retraction and fluid exudation beneath the marginal chorion; although the etiopathogenesis of this repeated haemorrhages is not understood. Recently Naftolin *et al* (1973) have reported 3 cases. The progress of circumvallation depends upon the extent of these haemorrhages and ultimate clot formation, its retraction and fluid exudation.

Occasionally, the haemorrhage may be extensive to initiate an abortion or clinical abruptio placentae.

The high risk of placental insufficiency dictates consideration of early delivery but the operative delivery increases maternal morbidity.

Conclusion

The syndrome of chronic abruptio placentae, hydrorrhoea and circumvallate placenta in 2 cases is discussed. Circumvallate placenta is caused by repeated marginal haemorrhages.

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