stability of the patient are more effective than local treatment or nerve injection, and there is no doubt but that local surgical intervention in any shape or form will serve only to increase the symptoms and add further disappointment to the sufferer.

The analgesic drugs, particularly codein and aspirin, do give transient relief but obviously their administration has its limits.

The only manoeuvre which holds out any real hope is the operation of prefrontal leucotomy which brings great relief. It is suggested that this is not offered to the patients nearly frequently enough. These unfortunate drag themselves round from doctor to faith-healer, to chiropractor and back to doctor. The usual half-hearted words of reassurance, 'nothing to worry about; no serious disease; try this bottle of medicine'; bring as much embarrassment to the patient, who has heard them all before, as they do to the doctor. The pain can break up homes (case 1), can destroy a wage earner (case 4) and may even be the goad to suicide. If such suffering can be relieved, is this not sufficient to balance the moral criticisms of leucotomy or the other, as yet not fully developed, procedures on the thalamus or cortex.10-13 Dott 14 remarks: 'Leucotomy brings great relief. That component of pain which we call distress or mental anguish is thereby abolished. They still have the physical sensation but it no longer distresses them and obsesses them. There is an alteration of emotional state and susceptibility and the patient is not the same personality that he was. It is doubtful if the operation is appropriate for the patient who can still cope with normal responsibilities. For the broken-down sufferer it is most beneficial.'

SUMMARY

Chronic pain in the face after trauma which may be very trivial, is a relatively common and most disabling syndrome. Because there is no obvious local pathology, it is not correct to assume that the disease is a psychoneurosis. Injuries to local nerve-endings or brain-stem lesions have both been advanced as hypotheses to explain the causation of the pain.

Treatment is notoriously inefficient, and it is suggested that frontal leucotomy should be performed more frequently in those whose life has been wrecked by the symptom.

REFERENCES


CHORIOANGIOMA

WITH REPORT OF A CASE ASSOCIATED WITH OLIGOHYDRAMNIOS

LOUIS RESNICK, M.B., CH.B., M.R.C.O.G.
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Chorioangioma is a rare, benign, encapsulated tumour of the placenta containing the component parts of a chorionic villus which has undergone enormous hyperplasia with or without degenerative change.1

This tumour, which can be large, hardly ever produces adverse effects in the mother except for excessive enlarge­
ment of the uterus in pregnancy due to an apparent

2 and a tendency to premature labour. Injuries to local nerve-endings or brain-stem lesions have both been advanced as hypotheses to explain the causation of the pain.

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2 and a tendency to premature labour. Injuries to local nerve-endings or brain-stem lesions have both been advanced as hypotheses to explain the causation of the pain.

In the present case there was the rare occurrence of oligohydramnios.

CASE REPORT

Primigravida aged 21 years. A healthy looking woman with marked hirsutism of the face, lower extremities and abdomen.

Previous History. Nothing of note. Her sister had twins.


Antenatal History. Nausea and vomiting from the onset of amenorrhoea, throughout pregnancy. On 21 April a threatened abortion was treated by complete bed rest, sedation and large doses of oestrogen. Nausea and vomiting persisted and so apparently did the pregnancy because the uterus gradually increased in size.

On 6 June blood examination showed haemoglobin of 12.4 gm., blood group O, and Rhesus positive. On 26 June quickening felt and foetal heart sounds heard.

On 11 October vertex presentation occurred, with deeply engaged head. Pelvic and foetal X-ray examination showed nothing abnormal.

On 12 October there was a sudden onset of severe diarrhoea and vomiting, with no rise in temperature or pulse rate. Blood pressure, 140/80 mm. Hg. Sulphaguanidine produced a rapid cure of the diarrhoea, but the vomiting persisted for no apparent reason.

On 19 October surgical induction was attempted with a Drew-Smythe catheter. Liquor amnii was not with-
drawn despite several punctures of the membranes.
Cervix 2 fingers dilated, thin and well applied to the
foetal head. Labour commenced 3 hours later and 5 hours
thereafter normal delivery of a female infant weighing
5 lb. occurred. No liquor amnii was seen to drain before
delivery, and very much less than 1 pint of liquor was
expelled with the child. The third stage of labour was
normal, the placenta being expelled spontaneously.

Infant. Cried well after delivery. There was marked
œdema of face, eyelids and vulva, which increased during
the first 3 days. A gain of 3 oz. in weight occurred
despite a ‘starvation diet’ for 72 hours, but from then
onwards progress was satisfactory.
Left talipes-equino-cava-valgus was noted, with no bony
or muscular deformities. This was treated by manipula-
tion.

Placenta. Weight, 20 oz. (570 gm.); measurements, 16.5 cm.
by 13.5 cm., and 1.25 to 2 cm. thick at its edges. The amnion
and chorion were complete with rupture in the centre.

Maternal surface well defined and intact cotyledons.

Foetal surface (Fig. 1). A smooth-looking, bluish-red, oval
tumour of soft rubbery consistency was seen in the centre of
the placenta immediately adjacent to an eccentrically inserted

middle of the tumour (Fig. 2) showed a well-defined encapsu-
lated mass, 8 x 6 x 4 cm., mottled in appearance, with
several large sinuses running through its substance and a large
dilated vein running over its surface. A septum was seen
dividing the tumour, which was separated from normal
placenta. About 1 cm. of normal placenta covered the base
of the tumour, and there was a small area of old blood clot
at one edge.

Microscopic Appearance (Figs. 3 and 4). The tumour was
surrounded by a false capsule of compressed chorionic villi,
which in some places showed necrotic change consisting of
fibrin, red blood cells and connective tissue.
The tumour was well lined by a single layer of syncytial
cells. (In some areas this was several layers thick). Diffusely
scattered throughout were many capillaries lined by a single
layer of endothelium. In some areas larger blood vessels were
seen, sometimes in the form of cavernous structures.
Small areas of myxomatous and hyaline degeneration were
also noted.

Conclusions. This tumour is a chorioangioma of the mature
type or vascular type, with some evidence of degeneration.
DISCUSSION

Clark 3 appears to have been the first author to record an account of a solid tumour the size of a man's fist in the substance of the placenta.

Beneke 4 first described this rare tumour as a chorioangioma. Since then 2 classical papers on this subject have been recorded, the first by Siddall 5 and the second by Marchetti 2 13 years ago, when he reported on 215 cases including 6 of his own. This latter author did not however include a case described by Rahmy. 6

Up to the present time a further 15 Chorioangiomata 7-17 have been reported, the last by Earn and Penner 17 who described 5 of their own.

Chorioangioma is not confined to man, and Sparapini 18 gave an excellent description of this tumour in the placenta expelled by a bitch in which premature labour occurred. A similar condition in the placentas of a cow was also reported.

Incidence. Chorioangioma is rare. Leopold 19 found only 1 instance in 7,000 placentae which were carefully examined. Siddall 5 found 6 cases in 600, Kühnel 1 in 9,000, and Marchetti 2 1 in 3,500.

Marchetti 2 and others suggest that this tumour is probably more common than quoted because many are either missed or not sought for.

Origin. The modern view of the origin and formation of chorioangioma is that a group of blood vessels and stromal cells are thought to undergo proliferation and growth outside the regular arrangement and restriction of the normally developing chorionic villus. The tumour forms in the chorionic surface plate or in some cases in the large trunk villi, and develops independently of the normally developed surrounding tissue.

Pathology. In the majority of cases single oval or round tumours have been described, with great variation in size, from a cherry to 700 g. (24 ounces) 20 lying just below the amnion and chorion and elevated above the foetal surface of the placenta. Several veins and arteries are usually seen crossing over its surface coming from the umbilical cord the insertion of which has no constant relationship to the site of the tumour. Multiple chorioangiomata are less frequently encountered such as in the second case described by Siegel and Holley, 7 in which 20 tumours were counted, many embedded in the maternal surface of the placenta in between the cotyledons, and others hanging by thin pedicles, containing an artery and vein, 'like small potatoes'. Davies 15 similarly delivered a placenta weighing 27 oz., to which 3 pedicled tumours were attached. Earn and Penner 17 in one of their cases found a small chorioangioma attached to the margin of the placenta by a long pedicle containing an artery and vein. The placenta in the majority of cases described in which large tumours were found, was heavier than normal, i.e., the weight ratio to that of the infant was greater than 1:6.

Bisection of the tumour through the placenta shows characteristically a mottled mass, like that of the cut surface of spleen or liver, traversed by fibrous tissue trabeculae. Greyish areas of myxomatous or hyaline degeneration are frequent, and dark bluish red areas indicating cellular vascular areas are easily seen. A sharp line of demarcation between tumour and normal placental tissue is common, with several large dilated sinuses running through it and over its surface.

Microscopic Appearance. Marchetti 2 described 3 types of chorioangioma.

i. The commonest is the predominantly vascular or mature type made up of ovoid chorionic stromal cells supporting numerous small blood vessels and capillaries.

ii. The less common immature, composed predominantly of more cellular elements, made up of young chorionic stromal cells but many more endothelial elements with occasional mitotic activity. Hence the earlier mistaken diagnosis of malignancy, such as fibrosarcoma, and endothelioma.

iii. The degenerative type, showing mainly myxomatous change, and sometimes hyaline and even calcareous degeneration, hence Virchow's 21 myxoma fibrosum chorioi. A mixture of all three types is common in the majority of chorioangiomata described.

A capsule made up of compressed fibrin and chorionic villi usually separates the tumour from the normal placenta.

CLINICAL ASPECTS

Parity. In 84 of the cases recorded by Siddall in which the parity was noted, 37 were primigravidae, and 47 multipara. There appeared to be no definite affinity.

Hydramnios and premature labour are the commonest manifestations of chorioangioma, and less frequently antepartum haemorrhage and obstructed labour. Kraus 22 found hydramnios in 9 out of 14 cases. Siddall 5 in 100 cases discovered hydramnios in 32.7%, and Marchetti 2 1 maintained that chorioangioma and hydramnios was more accidental than actual.

A careful study of many of the cases of hydramnios reported in the literature revealed that, in most instances, excessive enlargement of the uterus was the main criterion for the diagnosis of hydramnios and not an excessive amount of liquor amnii. The mere presence of an enlarged placenta due to a big chorioangioma would in itself produce a uterus larger than the period of amenorrhoea would warrant. In Siegel and Holley's 7 first case, twins were actually diagnosed because of a much enlarged and irregularly shaped uterus due to a large tumour in the placenta. As in other conditions where the placenta is very large, viz. in erythroblastosis foetalis with intra-uterine foetal death, hydramnios is more apparent than actual, as reported by the author. 23 With a small chorioangioma hydramnios is often not mentioned because the placenta is small, and there is no excessive liquor or excessively enlarged uterus.

Very rarely chorioangioma may occur where there is a very small amount of liquor as reported by Eggel. 24 Premature labour is as common as hydramnios, as reported by Albert, 25 Dienst, 26 and Siddall. 5 It is contended that it is not the hydramnios which is the contributing cause for premature labour, but the expulsion of a large foreign body in the placenta by the uterus.

Antepartum Haemorrhage. This is a less frequent complication. Siddall 5 mentions 19 cases of bleeding during pregnancy in the 100 cases reported. Roth 27 reports a case of placenta praevia at the 37th week which was seen on X-ray examination. Earn and Penner 17 describe antepartum bleeding at the 21st and 30th weeks with delivery of a stillborn infant (macerated), and also in a patient who
aborted at the 5th month of a placenta with a chorioangioma, and who died of cortical necrosis of the kidneys.  

Obstructed labour is reported by Emge and Margesson, due to a large chorioangioma, necessitating caesarean section.

Foetal Complications. As a result of premature labour, small infants and hence a high foetal mortality occurs. Albert 25 found 2 of 36 infants born with a tumour in the placenta, to be normal. The remaining children were stillborn, premature or died within a few weeks.

Dienst 26 in 39 cases found a gross mortality of 33%. Siddall 5 found 35 premature babies in 100 cases, where the condition of the baby was reported, and a mortality of 37.6%.

Kühnel 20 maintained that where the placenta weighed over 700 g., the foetal mortality was as high as 30-40%.

Foetal Malformation. Eggel 24 in his case associated with oligohydramnios found the infant to have club feet and hands. Siegal and Holley 7 delivered a foetus with anencephaly and spina bifida, where there was an enlarged placenta with many tumours.

In the present case the infant which was small, presented a club foot, and marked oedema in the presence of oligohydramnios.

**SUMMARY**

Chorioangioma is a rare condition which is usually not diagnosed until after delivery of the placenta. When present it is not infrequently found with a uterus which is larger than the period of amenorrhoea warrants, particularly when the tumour is large, when premature labour is common.

A case is described in which a chorioangioma was found in the presence of oligohydramnios, with the delivery of an infant with club foot, and marked oedema.

The pathology and clinical features are described.

I am grateful to Mr. G. McManus, of the Department of Surgery, University of Cape Town, for the photographs.

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**THE RELATIONSHIP OF UTERINE FIBROMYOMATA TO INFERTILITY AND ABORTION**


**Port Elizabeth**

**The Incidence and Relationship of Uterine Fibroids to Sterility and Abortion**

Most authorities agree that this is very difficult to evaluate, and the occurrence of pregnancy and full-time delivery in women with clinically obvious fibroids, is well known. Duckering 10 gave this incidence as 1.3%, Brown 5 as 2.8%, Pierson 35 as 0.6%, and in my series of 1,840 consecutive deliveries, 12 women had palpable fibroids, an incidence of 0.64%. The average age was 33 years, which is higher than the optimal age for child-bearing. The incidence of elderly primigravidae was 25% (higher than Duckering’s 10 incidence of 15.7% and the general clinical average of 2.98%).

Over the period of my review, 15 women with fibroids aborted, an incidence of 55%. This is higher than Pierson’s 35 incidence of 24% and Duckering’s 10 of 22.1%. The stage of gestation at which the abortions occurred was equally divided over the third, fourth and fifth month, and the average age of the group was 36 years, which again is higher than the optimal time for child-bearing; as Eden and Lockyer 11 have shown, there is delay in conceiving after the age of 30, and they quote Mathew Duncan, who states that 85% of women marrying after 40 were infertile. Of a total of 808 cases of abortion that I reviewed, 1.8% had fibroids, and De Lee and Greenhill 9 after taking into consideration all influencing factors in the causation of abortion, concluded that abortion was twice as likely to occur when a woman has fibroids.

In a survey of married women who had not yet reached the menopause, but who presented with fibroids causing