Summary

Six cases in which oil granuloma simulated cancer are described. The oil was introduced into the tissues therapeutically in every case. In four cases biopsy was not undertaken, and the patient underwent unnecessarily radical surgical treatment before the true nature of the lesion was recognized (excision of rectum in two, radical mastectomy in one, and castration in one). Timely histological examination enabled the granulomatous nature of the tumour to be recognized in the other two cases, and radical surgery was avoided.

It is probable that radical treatment would have been avoided in all these cases had the possibility of a granuloma been considered and biopsy performed. A feature common to all the cases was the failure to elicit the history of previous treatment with oily substances, or, when it was known, to recognize its significance.

Other types of tumour-mimicking granulomas are mentioned briefly.

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ANNULAR DETACHMENT OF THE CERVIX

BY

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Annular detachment or spontaneous amputation of the cervix is an uncommon complication of pregnancy. The condition was first described by Scott (1821). De Costa (1933) reviewed 16 cases collected from the literature and added a further one. In a later and more extensive review, Ingraham and Taylor (1947) analysed the clinical findings in 55 patients. Since then Arnott (1949), Uhma (1949), and Manly (1949) have each reported a case, and Jeffcoate and Lister (1952), in a paper postulating the probable mechanism and cause of cervical detachment, record the details of labour in an additional four cases.

The following is the case history of a patient who developed this interesting complication during the course of a prolonged labour.

Case Report

A primigravida aged 26 first attended the antenatal clinic when she was 10 weeks pregnant. On physical examination her general condition was good, the heart, lungs, and abdomen were normal, and on vaginal examination the uterus was in good position and corresponded in size to the period of amenorrhoea. The patient was booked for confinement in hospital and was asked to return to the clinic at regular intervals for antenatal supervision.

Pregnancy progressed satisfactorily until the 38th week, when it was found that the greatest diameter of the foetal head was still above the pelvic brim. As abdominal and vaginal examinations failed to detect an obvious cause for the "free" head, x-ray pelvimetry was carried out. The x-ray pictures revealed an android pelvis with measurements adequate to accommodate the foetal head, and a favourable outcome for vaginal delivery was predicted.

At the 41st week the patient was admitted to hospital in early labour. On examination her general condition and morale were good, her blood pressure was 125/75 mm. Hg, and albumin and acetone were not present in a specimen of urine. The foetus presented by the vertex with the back to the right and in front, and although the foetal head had settled in the brim, the greatest diameter had not descended into the pelvis. The foetal heart was regular and the membranes were intact.

Nineteen hours after the onset of labour moderately strong uterine contractions were occurring at intervals of three minutes, the foetal head had descended into the pelvis, and the condition of both mother and foetus was good. The patient's urine contained a marked trace of acetone, therefore a pint (570 ml.) of 20% glucose was administered by intravenous drip, following which the patient was given 1/3 gr. (22 mg.) of "omnupon" and 1/150 gr. (0.43 mg.) of scopolamine as a sedative.

Thirty-one hours after the onset of labour the uterine contractions had diminished in strength and frequency, and, because of the poor progress in labour, vaginal examination under general anaesthesia was carried out. This examination showed the cervix to be dilated three fingerbreadths, thin, and well applied to a tense bag of forewaters; the foetal head, which was well flexed, lay at the level of the ischial spines in the right occipito-transverse position. From these findings it was concluded that the cause of delay was not due to cephalo-pelvic disproportion, and it was decided, therefore, to allow labour to continue.

Fifty-two hours after the onset of labour the quality of the uterine contractions had improved. On rectal examination the cervix was almost half-dilated and the bag of forewaters was still intact. Omnupon and scopolamine were repeated by injection, and for the next 12 hours the patient rested well between her contractions. Re-examination at the end of this period showed that further cervical dilatation had not occurred, but in view of the good condition of the mother and foetus it was decided to repeat the sedative and postpone the question of termination by caesarean section until a further 12 hours had elapsed.

Seventy-four hours after the onset of labour the bag of forewaters ruptured spontaneously. The uterine contractions were moderately strong in character and, although the foetal heart was regular and the liquor free from meconium, the maternal pulse had risen to 110 beats a minute. On rectal examination the cervix was half-dilated and had become thick and oedematous. In the light of these findings it was decided to perform caesarean section.

During the preparation of the patient for operation, she suddenly expressed the desire to "bear down" and within a few minutes the foetal head appeared at the vulva. Normal delivery of a live 7-lb. (3.2-kg.) female child was rapidly followed by separation of the placenta and membranes. On cleansing the vulva at the completion of the third stage, a firm, round reddish-purple tumour was noted at the introitus. The tumour consisted of a thick saucer-shaped rim of cervix, the rim measuring approximately 1 in. (2.5 cm.) in thickness and admitting four fingers. The rim was attached to the left side of the uterus by a narrow pedicle in the manner of a circular flap hinged in the region of the left fornix. The pedicle was clamped and ligated and the cervical rim removed.

After delivery the mother and baby made satisfactory progress and were discharged on the tenth day of the puerperium. Six weeks after confinement the mother reported

to the post-natal clinic. On vaginal examination the cervical stump was almost flush with the vaginal fornices and was covered by healthy squamous epithelium.

Two years later the patient again became pregnant. She progressed to term, and after a labour of two hours' duration was delivered normally of a live 8-lb (3.6-kg.) infant.

Discussion

In De Costa's series of 17 patients 88% were primigravidae, 71% had early rupture of the membranes, and the average duration of labour was 63 hours. In the 55 case records analysed by Ingraham and Taylor, 75% of the patients were primigravidae, at least 48% had early rupture of the membranes, and the average length of labour was 48 hours. Cephalo-pelvic disproportion was considered to be present in some 25% of cases in both series; on this high incidence De Costa and Ingraham and Taylor concluded that cervical detachment was the result of disproportion which led to nipping of the cervix between the foetal head and maternal pelvis, with resultant oedema, necrosis, and separation.

In opposing this view, Jeffcoate and Lister point out that in labours complicated by disproportion the foetal head is not applied firmly to the cervix, which tends to hang loosely in the pelvis, nor is the fit of the foetal head in the pelvis accurate enough to produce an annular band of cervical necrosis. Again, the theory will not explain the mechanism in those cases in which disproportion is absent. Jeffcoate and Lister believe the primary factor in annular detachment is true cervical dystocia, which in turn leads to obstructed labour. In support of this concept they draw attention to three findings common to the majority of cases, the importance of which has been overlooked by previous authors. The three features are (1) strong uterine contractions, (2) a foetal head low in the pelvis, and (3) a thin well-effaced cervix with an external os surrounded by a rim of hard fibrous tissue and poorly dilated for the length of time the patient has been in labour. In cervical dystocia characterized by failure of the external os to dilate, the strongly contracting upper uterine segment forces the foetal head firmly on to the cervix, which becomes increasingly stretched to form a thin cap of tissue over the head; with increasing pressure, arrest of circulation and tissue devitalization are inevitable; and finally, by a combination of uterine retraction and downward thrust through the foetus, tearing and annular detachment of the cervical cap result. The level of detachment generally lies at the cervico-vaginal junction, but may vary, depending on the level of the pressure ring exerted by the foetal head and on the degree to which the cervix becomes dilated.

Cervical dystocia, the precursor of detachment, may be primary or secondary; in the former, imperfect dilatation may be due to an inherent defect of the lower cervix such as an excess of fibrous tissue, or to failure of the normal preparatory softening so necessary for easy stretching during labour; in secondary dystocia, scarring and excessive fibrosis in the region of the external os may be the aftermath of previous birth trauma or such gynaecological procedures as extensive and badly executed cauterization or conization.

Prevention of annular detachment obviously lies in the early recognition and treatment of cervical dystocia. The latter is to be suspected in a patient with the triad of signs stressed by Jeffcoate and Lister—namely, strong uterine contractions, a foetal head well down into the pelvis, and failure of the external os to dilate. Vaginal examination will reveal the thin well-applied cervix and the characteristic sharp hard fibrous rim around the external os. Occasionally, as happened in two patients whom I examined recently, the rim of the cervix will suddenly yield before the examining finger, following which full dilatation and delivery are quickly completed; in other cases, two or more small incisions through the rim—that is, cervicotomies—are necessary.

Healing of the torn or incised rim is good, and no trauma was noted on the post-natal examination six weeks later.

Once detachment has occurred, little is required in the way of treatment; as a result of vascular thrombosis secondary to prolonged pressure, bleeding from the cervical stump is slight, and delivery, either spontaneous or with forceps, is accomplished without difficulty.

The chief danger to the mother is from puerperal sepsis, which was responsible for the high maternal mortality (7–11%) in the cases recorded in the literature. A high vaginal swab taken immediately after delivery and the use of the appropriate antibiotic in those cases shown to be infected will largely eliminate this danger.

In the recorded series the stillbirth rate varied from 29 to 40%, a mortality which Jeffcoate and Lister believe to be due to the length of labour rather than to difficulty in delivery.

Summary and Conclusions

A case of annular detachment of the cervix is reported. The condition is the late result of cervical dystocia. The latter should be suspected where there is strong uterine action, a presenting part engaged in the pelvis, and a cervix thin and well applied to the presenting part.

Treatment of cervical dystocia consists of digital dilatation or incision of the fibrous cervical rim. The main risk to the mother is from sepsis and to the foetus from the effects of long labour.

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Medical Memoranda

Need for Repeated Microscopical Tests in Gonorrhoea

The following case seems interesting, and certainly points the moral that prevention of transmission of gonorrhoea, with the patient's co-operation, of course, can be assured only by repeated microscopical tests and by treating the presence of pus cells in the genito-urinary discharges with due suspicion.

CASE REPORT

A man aged 22 attended my clinic on August 16, 1954, stating that, following extramarital intercourse six weeks previously, he had had a urethral discharge, which had stopped and recurred without treatment during the past four weeks. Also for the past four days he had had a sore eye and pain and swelling at certain joints.

Examination disclosed a very slight purulent bead of discharge, obtained only by milking, with hazy urine which showed heavy threads in all glasses. He also had tenosynovitis affecting the sheaths of tendons round the left ankle, synovitis of the right knee-joint, which was distended, and iritis of the right eye. The prostate was enlarged and the prostatic-vesicular fluid showed scanty pus cells. Neither the urethral discharge nor the prostatic-vesicular fluid showed gonococci either in smear or on culture. The Wassermann, Meinicke, and gonococcal complement-fixation reactions were all negative.

In spite of the negative findings in respect of gonococci it was thought that the case was one of gonococcal infection rather than Reiter's disease, and treatment was started on this assumption. Penicillin, 800,000 units, in the form of