ANALYSIS OF VAGINAL DELIVERY FOLLOWING CAESAREAN SECTION

by

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When we consider the relief caesarean section has offered to the obstetric world, it is not amazing to find ever increasing indications for this mode of delivery. This increase in relative indications for caesarean section has created the problem of management of labour in subsequent pregnancies.

In the two year period under review, between 1st January, 1970 to 31st December, 1971, out of 22,392 total obstetric cases, 15,392 were normal deliveries and 1,887 were delivered by caesarean section, which gives a caesarean section rate of 8.1%. Our overall maternal mortality rate during this period was 3.4 per thousand in normal deliveries and in caesarean section it was 20.08 per thousand, 5.9 times more in ceasarean sections. The confidential enquiries into maternal deaths in 1964-66 and the British survey of perinatal mortality in 1963, (Butler & Bonham 1963) make it amply apparent that in spite of all the advances in surgery, anaesthesia, availability of blood, asepsis, effective and useful antibiotics, the maternal mortality rate is 7 times more and perinatal mortality is three times more in caesarean sections than in vaginal deliveries.

Selection of Cases

Each case was assessed individually. A flexed and engaged head with a ripe cervix was considered favourable. Cases where the head was free but pelvis considered adequate and those with history of normal delivery prior to caesarean section were also considered favourable for normal delivery.

The patients taken up for trial were assured that the moment safety of vaginal delivery became questionable, section would be performed. Soon after the onset of labour all the oral intake was stopped except a few antacid tablets. Intravenous infusion was started. A constant watch was kept on the progress of labour. The membranes were ruptured artificially when the cervix was more than half dilated. Episiotomy and forceps were employed liberally. Ergometrine 0.5 mgm. I.V. was given as a routine on birth of anterior shoulder and placenta was delivered by Brandt-Andrew's controlled cord traction method. The uterus was then explored digitally to detect scar dehiscence.

Results

One hundred and ninety-seven cases were selected for test of labour for vaginal delivery. One hundred and twenty-one delivered vaginally which gives 61.2% success rate. Of these, 41 were delivered spontaneously with episiotomy. In 75 a low forceps was applied. Two needed Das' forceps at midpelvis and two were delivered by Kiellands forceps. One had assisted breech delivery.

In this series there was no maternal death. Puerperal pyrexia occurred in

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Received for publication on 8-5-1972.

five and postpartum haemorrhage in one. Two suffered from abruptio placentae.

There were, however, 5 foetal deaths, the foetal mortality rate being 6.05%. Six babies were irritable and one had convlusions. Seven developed neonatal jaundice, but none required exchange transfusion. One baby was premature by weight.

Out of the 121 that delivered vaginally, two were of upper segment scar and the rest were of lower segment scar. The upper segment cases were received late in labour when the head had descended to +1 station and there was no alternative but to allow delivery to take place. The pains were quick and forceps extraction was considered safer than delivery by caesarean section at this stage when the head was impacted low in the pelvis. On exploration after delivery a depression was palpable but there was no actual rupture. No haemorrhage occurred.

Of the lower segment caesarean scar, 16 had a palpable depression of ½" to 1½" at varying parts of the scar, but no rupture. One of 121 had a definite rent in scar. Laparotomy was performed in this patient and scar was repaired. A small haematoma had formed under the peritonium but no big vessels were torn.

Discussion

There is little scientific evidence available on which to depend as measure of efficiency of uterine scar. Pyrexia has been blamed for a weak scar, but there is no way to tell that an abdominal wall wound healing or sepsis is directly related to the condition of uterine wound. Poidevin (1961) has shown that the uterine wound can be sound when postoperative corticosteroids are administered which adversely affected the abdominal wound. The clinical findings of tenderness over the scar and vaginal bleeding though mostly depended upon in clinical practice are not completely reliable. In the present study the scar depression was found only in 7 of the twenty cases who have had vaginal bleeding considerably more than a 'show'. The lateral hystrography of Poidevin is reliable but not always feasible.

The world opinion is understandably divergent. Bak and Hyden (1955) after studying 52 cases of uterine rupture in 71,483 deliveries concluded quite firmly "once a caesarean always a caesarean". Pillsbury (1963) endorsed the same view. He quoted Dr. Morlay saying "In not doing so, what are we trying to prove." Riva (1961), however, holds the opposite view. Pioneer in vaginal delivery following caesarean section he stresses the importance of selecting the cases. He concludes that the same factors which make a caesarean section safe make the vaginal delivery still safer, saving the patient the hazards of anaesthesia and surgery and prolonged disability which an abdominal would necessarily entails. Riva's success rate in selected cases was as high as 73%. Peel in his presidential address (1968) pointed out that the maternal mortality rate in caesarean section was 10 times the overall maternal mortality. His success rate was 40.6%. His figure was low because a large proportion of his patients were diabetic. Legerlotz (1968) had a successful vaginal delivery rate of 70%. Menon's (1962) rate was 45%. Jhaveri (1969) reported a 73% rate of vaginal delivery in cases with non-recurrent indications. In the present series, the success rate was 61.2%.

Summary

Out of 22,392 total obstetric cases in the two years 1970 and 1971 the caesarean section rate in our institution was 8.1%. One hundred and ninety-seven were

allowed test of labour and 121 delivered naturally, the success rate being 61.2%. In 16 of the 119 lower segment scars, a depression was palpable but no rupture Only one required laparotomy where repair of scar and salpingcetomy, was performed.

Acknowledgement

I cannot thank enough Prof. S. N. Upadhyaya B.S., M.D., F.I.C.S., F.A.M.S., F.R.C.O.G. Professor Director of our Institution for his encouragement, criticism and guidance.

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