# VAGINAL DELIVERY AFTER PREVIOUS CESAREAN SECTION

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SUMMARY

The Authors evaluate the percentage of vaginal delivery after previous cesarean section, in a group of 57 patients.

Results show that 34% of the patients delivered spontaneously, and when recurring causes are excluded the percentage rises to 39%.

The Authors conclude that a careful monitoring of labour can prevent unnecessary cesarean section in patients who underwent previous surgical delivery.

Birth by cesarean section is in progressive and constant increase in the entire Western world. The factors that theoretically increase the recourse to cesarean section are: dystocia due to fetal-pelvic position or misproportion; dynamic dystocia; foot presentation; acute fetal distress; high risk pregnancy due to either fetal or maternal disease, and repeated cesarean section. This last indication is responsible for the numerical increase in cesarean sections in 30% of the cases ([1]). Although many even well-equipped obstetric centers still practice the rule that "the first cesarean section always leads to the second", our Clinic has established a protocol which allows patients with a previous cesarean section, performed for non-recurring causes, to give birth via the vagina if they so prefer.

## MATERIAL AND METHODS

From January 1, 1981 to June 30, 1982, 112 women with previous cesarean section performed on the lower uterine segment have given birth at the Obstetric and Gyneoclogic Clinic of the University of Padua.

Sufficient documentation regarding the first cesarean section and the eventual associated complications was available only in 57 cases, which form the basis of this study. The average age of the patients was 32±3 years. Procedures for vaginal delivery were standardized:

— patients with fever complications following their first cesarean section were excluded;

— patients with indications of recurrent causes (fetal-pelvic misproportions) at first cesarean section were excluded;

— labor was not induced until after the completion of the 40th week of gestation, and then for not more than 8 hours with mild oxytocine stimulation (max. 10 mU/min) and continuous BCF monitoring with tokographic recording.

At birth, Apgar scores were carefully evaluated, and complications following both cesarean section and spontaneous birth were recorded.

## RESULTS

Of the 57 patients admitted to this study, 19 (34%) gave birth spontaneuosly via the vagina and 38 (66%) underwent cesarean section. All vaginal births were



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Table 1. — *Indications for primary cesarean section and subsequent pregnancy outcome.*

| | No. of patient | Subsequent vaginal deliveries No. | % |
|---|---|---|---|
| Acute fetal distress | 14 | 6 | 42.8 |
| Hight risk pregnancy | 11 | 4 | 36.3 |
| Breech presentation | 10 | 7 | 70.0 |
| Feto-pelvic disproportion | 8 | — | |
| Dynamic dystocia | 8 | | |
| Placental detachement | 3 | 1 | 33.3 |
| Placenta praevia | 2 | 1 | 50.0 |
| Uterine malformation | 1 | 1 | |
| | 57 | 19 | |

Table 2. — *Apgar score.*

| Vaginal delivery | | Cesarean section |
|---|---|---|
| 5 | — | — |
| 6-8 | 3 | 4 |
| 9-10 | 16 | 34 |
| | 19 | 38 |

spontaneous, and the modalities of birth in reference to the indications for the first cesarean section are reported in table 1. If recurring causes are excluded, the percentage of spontaneous births rises to 39%, with 61% repetition of cesarean section. Oxytocine was employed to induce labor in 3 patients who then gave birth spontaneously, and in 5 who underwent cesarean section. Apgar scores at birth are reported in table 2. No complications were recorded in the group of patients with spontaneous vaginal delivery except for dehiscence of an episiotomy suture. In the group with repeated cesarean section, there were 5 cases of puerperal hyperpyrexia, and two cases required blood transfusion for severe anemia. In one of the 57 patients, there was uterine rupture.

## DISCUSSION AND CONCLUSION

In the light of our findings, the recent report ([1]) that in the USA more than 98% of the women after cesarean section undergo repeated cesarean sections for successive pregnancies is surprising. Undoubtedly, vaginal delivery after cesarean section carries a certain risk, referred to the possibility of uterine rupture. We believe, however, that this risk in extremely low if labor is followed by continuous cardiotokographic monitor, and if surveillance of labor itself is carried out in equipped centers and by a ready, competent staff. The percentage of spontaneous births after cesarean section that we report here (33%) is quite close to the figures (47.5% 39.5%) observed in much larger patient groups (2.4%). If one considers the case series with control studies ([3]) which reports a percentage of 82% of vaginal deliveries after a first cesarean section for non recurring causes with no complications, one must conclude that the axiom "one cesarean section equals two cesarean sections" should at least be reviewed in the light of modern obstetrics.

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