

Subgaleal hemorrhage following manual rotation of the fetal head

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Abstract

CASE INTRODUCTION: We present a case of a subgaleal hemorrhage following a spontaneous vaginal delivery preceded by manual rotation of the fetal head.

CASE DESCRIPTION: A 19-year-old Gravida 1 Para 0 at 38 weeks presented with decreased fetal movement. The fetal heart tracing (FHT) was Category I. AFI was 30. A BPP was 8/10. Labor was induced due to polyhydramnios and decreased fetal movement.

Labor was induced with Cytotec followed by Pitocin. After becoming complete and pushing for one-hour, fetal station descended from 0 to +1 with significant caput noted. Ultrasound noted occiput posterior position. Manual rotation of the fetal head was performed to occiput anterior. 20 minutes later, the previously reassuring FHT developed recurrent decelerations. 20 minutes later, spontaneous vaginal delivery (SVD) of a 2840-gram male with Apgar scores of 2 and 4 occurred. The umbilical cord arterial pH was 6.95. A tight double nuchal cord was noted.

The baby underwent hypothermia protocol for hypoxic ischemic encephalopathy. An enlarging head diameter was measured. He developed anemia and DIC. Packed RBCs, cryoprecipitate, and fresh frozen plasma were transfused. Imaging noted a large subgaleal bleed with otherwise normal brain structure.

CONCLUSION: The subgaleal space is a potential space between the scalp and the skull. When emissary veins are stretched, they may tear and bleed. The subgaleal space can hold an enormous amount of blood. Neurological damage may result from cerebral compression, hypoxia, and hypotension.

Subgaleal bleeds are most associated with vacuum delivery, but also reported after SVD and cesarean section. Lesser known, however, there are rare reports of subgaleal bleeds after manual rotation of the head. Theoretically, manual rotation could cause a sheering force to the subgaleal vessels. Manual rotation of the head, which assisted the fetal descent, is thought of as a benign procedure. It cannot be determined with certainty if the manual rotation of the fetal head contributed to the subgaleal bleed. Given much caput, the bleed may have started before rotation. The baby's prognosis is good given prompt intervention.