Denouement and Discussion

Halo Scalp Ring

A clinical diagnosis of halo scalp ring was made based on the history of prolonged pelvic pressure prior to delivery, caput succedaneum with extensive molding at birth, and a clinical picture of an annular alopecic ring on the fetal scalp that corresponded to areas of bony prominence. Halo scalp ring is a form of perinatal alopecia resulting from uterine, cervical, or vaginal pressure on the neonatal scalp that compromises blood flow and produces hypoxic-ischemic tissue damage.[1-3] Halo scalp ring usually occurs in babies born to primigravida mothers after a prolonged delivery and is attributed to caput succedaneum but cases following a Cesarean section have been reported.[4] Halo scalp ring can greatly vary in size and can range from mild alopecia to full-thickness necrosis. The diagnosis is made clinically based on typical history of prolonged or difficult labor resulting in extensive molding or caput succedaneum along with the typical location of the alopecic line along the areas of bony prominence extending from the parietal to occipital scalp in a ring.

Halo scalp ring is a localized physical phenomenon with no systemic associations and requires no further investigation or evaluation for congenital anomalies. The natural course of alopecia in most instances is partial regrowth of hair; however, a history of hemorrhagic or necrotic caput succedaneum is of more concern because deep scarring may destroy hair follicles, resulting in scarring alopecia.[5] Boney prominences of the parietal and occipital calvaria are likely under the greatest pressure and thus may experience ischemia during delivery, resulting in pressure necrosis. Observation is the most appropriate initial therapy once infection is ruled out. However, if scarring has occurred, consideration should be given to correction of the defect by tissue expansion and surgical excision of any residual areas of alopecia prior to school age to avoid psychological trauma common in children with cutaneous abnormalities. The incidence of halo scalp ring is unknown, with only 12 cases previously reported. However, with only 1 previous article in the pediatric literature and a frequently self-resolving natural history, the diagnosis is likely often not made.

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