CASE REPORT

Permanent baldness following caput succedaneum

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SUMMARY. A patient who had partial permanent scalp baldness from birth is described. The role of caput succedaneum in its aetiology is discussed.

Introduction

MANY cases of haemorrhagic caput succedaneum have been reported. However, I have not found a case recorded of severe necrosis of the fetal scalp which caused a band of baldness, requiring treatment in later life by plastic surgery.

Description

A young man aged 17 came to the surgery for medical advice, as he was embarrassed by a ring of baldness on his scalp (Figure 1). The ring went around his vertex and was about two cm wide, appearing as an old scar. The baldness had existed since birth and was accepted as a form of birth injury. The patient's mother was therefore interviewed and the following history recorded, supplemented from the past records.

Mrs M., aged 35 years, with two children, was admitted to the maternity unit at 36 weeks' gestation, because of her raised blood pressure. Her previous two deliveries were uneventful, but both babies were born at 37 weeks' gestation, labour being quite short in each case, lasting approximately three hours and two hours.

Shortly after her latest admission she started to leak liquor without any uterine contractions. The colour of liquor gradually became brown. There was no change in odour. After six days of leaking liquor Mrs M. went into labour, which lasted about two hours, and spontaneously delivered herself of a baby boy weighing 3.38 kg (7 lbs 7 oz). The baby was in good condition apart from a considerable swelling of the parietal area of his scalp. Mrs M.'s description of the swelling was: "Like a second head attached to the top of the original head." The swelling subsided during the next few days but an area of pressure necrosis developed round the edge, almost encircling the head. The baby was treated in the special care unit. The central area of the scalp remained viable. The scalp healed well during the next six weeks but the scar remained hairless.

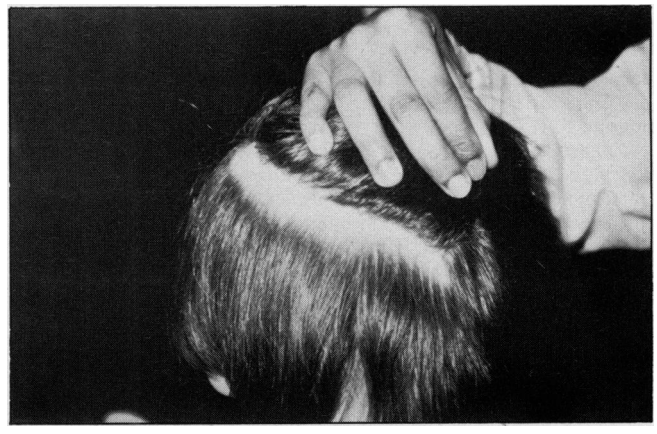
Discussion

When the fetus presents as a vertex, the presenting part undergoes certain changes in its shape owing to the pressure effects of labour. Caput succedaneum is relatively common in prolonged labour. The extent of the caput succedaneum is usually related to the length of labour and may be formed before complete dilatation of the cervix or during the second stage of labour.

In this particular case, although the labour lasted only a short time, the mother had been leaking liquor for six days. This has not previously been described. It is possible that the patient was in a state of concealed labour with the membranes ruptured, and during that period the vertex was compressed by the undilated cervix giving rise to a massive haemorrhagic and necrotic caput succedaneum. This might explain the brown colour of the liquor.

Microscopic examination of the tissue from a caput succedaneum reveals an excessive amount of fluid and mild extravasation of blood cells around smaller blood

Figure 1. *Part of the lesion of caput succedaneum in a 17-year-old man.*



vessels. Generally the tissues return to normal in a few days.

Massive haemorrhage in the scalp of the newborn infant, leading to severe anaemia and post-haemorrhagic shock has been described by Pachman (1962). Massive haemorrhage into the scalp of a newborn infant has been described by Townsend (1894). Aballi and colleagues (1959) reported two newborn infants with massive scalp haemorrhage 12 hours after birth.

In most of the above reported cases, although the haemorrhage was within the fascial planes of the scalp, there was no necrosis of the scalp leading to permanent damage to the hair follicles in the dermis, as happened here. The patient was treated by plastic surgery.

References

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Pachman, D. J. (1962). Massive hemorrhage in the scalp of the newborn infant: hemorrhagic caput succedaneum. *Pediatrics,* **29**, 907-910.

Townsend, C. W. (1894). *Archives of Pediatrics,* **11**, 559.

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Curbing child poisoning

The value of child-resistant containers in prevention of accidental poisoning is emphasized in a paper we publish this week (p.593). The decline in recent years in poisoning by analgesics and antipyretics must be attributed to the child-resistant packaging of such products for over-the-counter sale. Unfortunately, there is as yet no sign that the voluntary scheme for the dispensing of such products in child-resistant containers is being taken seriously by pharmacists, the Boots organization being one of the honourable exceptions.

The nuisance to adults of child-resistant containers is, of course, well known, but such difficulties can be greatly reduced if pharmacists were to ensure that their clients were educated in the use of such containers. Inconvenience is a small price to pay for a child's safety. The voluntary scheme does provide exemptions for the elderly and the arthritic who may be seriously disadvantaged by child-resistant containers. It is also open to anyone specifically to ask that a product should not be dispensed in a child-resistant container.

Reference

Pharmaceutical Journal (1979). **223**, 584.

Natural history of bacteriuria in schoolgirls

To define better the natural history of bacteriuria in females, we followed 60 schoolgirls with bacteriuria and 38 matched controls for periods ranging from nine to 18 years. Among the schoolgirls with bacteriuria ($\geq 10^5$ organisms per millilitre in two or more consecutive cultures), reflux was repaired in five, nephrectomy was performed in two, and reduced inulin clearance was noted in one subject with atrophic pyelonephritis. Serum creatinine was slightly higher in cases than in controls. Renal scars or caliectasis occurred in 16 cases but in none of the controls. Blood pressure was similar in both groups. Episodes of bacteriuria in cases and controls were, respectively: five or more episodes, 21·7 and 2·6 per cent; and episodes during pregnancy, 63·8 and 26·7 per cent. Seven children of the cases but none of the children of controls showed urinary tract infections. Bacteriuria among schoolgirls defines a group at great risk of recurrent symptomatic infections and renal scars and at low risk of reduced renal function.

Reference

Gillenwater, J. Y., Harrison, R. B., & Kunin, C. M. (1979). Natural history of bacteriuria in schoolgirls: a long-term case-control study. *New England Journal of Medicine,* **301**, 396-399.

Preventing accidents in childhood

The general conclusion from these and many other studies is that safety devices built in as a constant feature of the environment are more effective than attempts to alter people's behaviour. Child-resistant containers have reduced the incidents of poisoning far more successfully than have exhortations to "keep all medicines out of the reach of children", and flame-proof clothing and satisfactory fire-guards almost certainly have been the main factor in the reduction of deaths from ignition of clothing (although the reduction in the number of open fires and the changeover from nightdresses to pyjamas has also played a part). Dershewitz and Williamson (*American Journal of Public Health,* 1977, **67**, 1148) say: "In the field of injury control, passive measures, such as well conceived construction and product safety regulations, are more effective than attempts at changing human behaviour. Spending hundreds of millions of dollars to broadcast ineffective health messages and platitudes . . . hardly seems worthwhile."

Reference

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