Babies born with 'bat ears' have traditionally faced corrective surgery. Over recent years, clinicians have turned to a non-surgical alternative - ear splints.
It is common to find a misshapen or ‘bat’ ear at birth, but it can lead to considerable distress in later years (Bradbury et al, 1992). Some parents opt for an ‘ear pinning’ operation called pinnaplasty or otoplasty. This involves reshaping the cartilage. It is not a procedure that can take place much before a child’s fifth birthday, as the cartilage remains too pliable to hold sutures prior to this (Gault and Rothera, 2008).

Despite the prevalence of babies born with ‘bat’ ears, pinnaplasty rates have fallen. Recent figures confirm that pinnaplasty surgery is becoming less common in Scottish children (Chan and Stewart, 2007). They echo the most recent audit of the British Association of Aesthetic Plastic Surgeons that showed all types of cosmetic procedure had increased with the exception of pinnaplasty, which had decreased by 20% during the same period. Since 1996, treatment of misshapen or prominent ears at birth using Ear Buddies™ splints has become increasingly popular (Tan et al, 1994). Around 15,000 ears have been splinted in the last ten years, and it is highly likely that this has had some influence in reducing the number of pinnaplasty procedures performed (Fiumara and Gault, in press).

Neonatal splintage has recently been recommended by the British Medical Journal in its Lesson of the Week urging that: ‘Neonatal paediatricians, obstetricians, general practitioners and midwives are educated about early detection and how to initiate treatment themselves’ (Lindford et al, 2007).

Many parents are told erroneously that their newborn’s ears are best left until the age of five when surgery can be performed. Others are told it will improve with age, or that simple taping will work, when in fact the opposite is true. Odd-shaped ears, which do not become completely normal in appearance within 48 hours of birth should be splinted.

Around 4% of children are born with prominent ears and another 2% develop them within the first six months. Critically, about one-third of ears that are prominent at five years did not become obvious until the age of three months or so (Tan and Gault, 1994). Babies have short necks, and clothes with high collars or even the baby’s own shoulder can push the ears forward on head turning, increasing the prominence. A mattress or the head support of a car seat can do the same, in other words, many such ear problems are acquired. Ears that become folded forward during sleep and breastfeeding are particularly at risk of becoming prominent.
About two-thirds of ears are prominent because they lack an antihelical fold – the fold closer to the centre of the ear, and the remainder because of a deep conchal bowl (the shell-shaped part). The use of a splint within the scaphal hollow or upper third of the ear corrects both causes simply and easily. Other ear deformities, such as abnormal folds or Stahl’s bar, a folded-over helical rim (the outer edge), and rim kinks, which are extremely difficult to fix surgically in later life are relatively simple to remould soon after birth. Cup ear, where the ear is cone shaped, is the most difficult problem to splint, since there is often a constricted element that requires surgery to enlarge the rim, but even this can be greatly improved to allay pre-surgical teasing.

The earlier splintage is begun, the easier it is and the shorter the period required. There are many other advantages – newborns sweat little and the tapes securing the splints stick well. Newborn babies also move little and have not developed the motor skills required to reach the ears and dislodge the splint. Nevertheless, great success can still be achieved in children as old as 18 months with parental persistence (Yotsuyanagi et al, 1998).

Pinnaplasty is still the most common cosmetic operation performed on children in the UK, but in around 5% of these, there is a serious complication (Calder et al, 1994). It is estimated that in the UK, at least 200 cases per year suffer serious deformity or even loss of part or the whole of the ear as a result of pinnaplasty surgery (Gault, in press). Now there is a real and practical opportunity to avoid it altogether.

Consultant plastic surgeon David Gault is from The London Centre for Ear Reconstruction

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