Screening for the detection of congenital dislocation of the hip

Sir,

We have read with interest the special report on ‘Screening for the detection of congenital dislocation of the hip’ prepared by an advisory committee for the Secretary of State. It is recommended that the Ortolani/Barlow manoeuvre be carried out within 24 hours of birth; first the Ortolani procedure then the Barlow manoeuvre, ‘with the thumb on the inner side of the thigh, backward pressure is applied to the head of the femur,’ if a ‘clunk’ is obtained, ‘the head is said to be subluxatable (dislocatable)’. In other words, the hip is dislocated.

One of us (CHC) has noticed increasing laxity in the hip joint of an infant who has been repeatedly examined to show physical signs to junior medical colleagues. In view of the risks associated with ‘excessive manipulation of the hip joint’, the advisory committee recommend that ‘duplication of the examination by both midwife and doctor should be avoided. Each maternity unit should determine its own policy in this respect to ensure that there is only one examination.’ We submit that this advice is unrealistic and that in practice a midwife who discovers that she can dislocate a hip will continue to ask the resident doctor to confirm her findings and this will be checked by a paediatric registrar or consultant, or both. The orthopaedic surgeon will probably carry out a further examination before applying a splint for what has become a recurrent dislocation.

The Southampton experience of an increasing incidence of late congenital dislocation in an area practising enthusiastic neonatal screening with a reluctance to undertake unnecessary early splinting leads us to the conclusion that Barlow’s manoeuvre in the first two days of life was converting normal joint laxity into established dislocation.

Barlow’s manoeuvre does not distinguish between a normal hip and one that untreated will develop an established dislocation. Barlow showed that dislocatable hips are much more common in the first three days than later in the first week, and no cases of late dislocation were discovered in his infants who were first examined after the age of 3 days.

We consider that during the first 48 hours of life when ligamentous laxity is so common great care should be taken not to dislocate a baby’s hips either by swaddling with adducted thighs or by Barlow’s manoeuvre. At this time clinical examination should be directed to discovering established dislocation by looking for asymmetry, apparent shortening of the femur, restriction of abduction, and a ‘clunk’ by the Ortolani procedure.

We welcome the recommendation that repeated ex-

Correspondence

Sir,

It has always been my impression that the chance of detecting congenital dislocation of the hip would be increased if the number of examinations by an experienced observer were increased. In the recent article on congenital dislocation of the hip it is stated, ‘In view of the risks associated with excessive manipulation of the hip joint, duplication of the examination by both midwife and doctor should be avoided.’

What is the scientific evidence that there are such risks, and if there is indeed a risk what is its incidence?

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References


Dr Dunn comments:

Thank you for inviting me as a member of the SMAC/ SNMAC working party under the chairmanship of Professor E Stroud to respond to these letters.

Dr S Cheetham and Garrow’s first point deals with a semantic problem. Most abnormal hips at birth are of the unstable, subluxatable variety. They can be partially dislocated by backward pressure when the thigh is adducted and flexed. We included the word ‘dislocatable’ in parenthesis because this term is in common use, even though such hips do not fully dislocate, as may be shown at necropsy.

Next they question our exhortation to avoid excessive manipulation of the hip joint, a point also raised by Dr Blumenthal. The working party thought it important to emphasise that repeated examination might damage an unstable hip. While there is no clinical evidence to support or refute this belief, manipulation of the unstable hip at necropsy seems to increase hip instability. The artery in the ligamentum teres is also vulnerable to trauma. Of course, it was appreciated that some repetition of hip examination was necessary as part of the ongoing screening process as well as to confirm the diagnosis in suspected cases.