

A scientific study of babies' hip positions in baby carriers

Babies have been carried throughout the ages, and in all cultures the world over. Carrying a baby in a baby carrier not only gives the baby an immediate sense of closeness and security, it also allows the parent to move around more freely. Moreover, it reinforces that valuable bond between baby and parent. There has been a great deal of discussion on the ergonomics of baby carriers and whether they are linked to the risk of a baby developing hip dysplasia, an abnormality or incorrect development of the hip, also known as hip luxation or hip instability.



BACKGROUND

Hip dysplasia may be caused by a number of different factors. For example, it is more common in firstborns and girls, and in breech babies*. Hereditary factors also play a role.

It appears that external factors can also influence the way in which babies' hips develop in the first few months of life, and this has formed the basis of this study. Use of baby carriers is becoming increasingly common, but never before has ultrasound technology been used to examine how babies' hips are affected as a result of them being carried in a carrier. In this study, Spanish researchers have examined the hips of babies carried in three different baby carriers offering varying degrees of support to the baby's thighs. Two of these baby carriers were supplied by BabyBjörn.

THE EXAMINATION

The ultrasound scan was performed on healthy babies aged 1.5–3.5 months, with stable hips and an average weight of 5.2 kg. The examination is the easiest to perform at that age, and moreover, the hips have developed sufficiently by that time while not yet being entirely in a fixed position.

A total of 15 babies were examined: five boys and ten girls. The babies' hips were all of type 1 according to the Graf method (an ultrasound method used to classify babies' hips at birth). Three different parameters were studied as part of the examination: the alpha angle (60 degrees or less), the head of the femur, and the distance to the pubic bone.

Only baby carriers were used in the examination because they result in a more or less fixed position of the baby's hips compared with slings. This provides more homogeneous data than if the baby's position has to be adjusted every time before putting on the baby carrier. Only the babies' right hips were examined in order to reduce the amount of time required for examination and to facilitate the procedure. Moreover, the examination was always performed while the baby was immobile.

RESULTS AND CONCLUSION

The results of the examination showed normal ultrasound parameters for the right hip in all the babies participating in the study and carried in the baby carriers in question. Nor were any differences in parameters identified in relation to the gender, age or weight of the babies.

To summarise, this means that babies with normal, healthy hips are not affected by being carried facing inwards in any of the baby carriers studied.

** Breech position, or breech presentation, is when the baby is lying in the uterus with their bottom facing downwards in late pregnancy.*

Source Fontecha CG, Coma Muñoz A, Catala Muñoz A. Exploración ecográfica de las caderas del bebé en mochilas de porteo. *Rev Esp Cir Ortop Traumatol.* 2019; 63:289–294. (Evaluation by ultrasound of the hips of babies carried in baby carriers, C.G. Fontecha, A. Coma Muñoz, A. Catala Muñoz.)

Please click on the link to find out more information about the study:
<https://www.ncbi.nlm.nih.gov/pubmed/30928246>