Infant Flat Head Syndrome: Unexpectedly Common, Early Appearing, and Multi-National
Warren O. Eaton and Ioana Pirlog, University of Manitoba

Hypothesis: Prolonged equipment use maintains back of head against a solid surface and increases risk of DP.

METHOD

Recruitment
Googling for developmental phrases like 3 month old baby or my baby progress, triggered text ads.

Clicking on the ad led to a study description, a consent form, and an online survey with questions about milestones, equipment usage, and health. 684 two-to-seven-month-olds comprised the analysis sample.

Measures
Equipment Time
Parent estimated the typical daily minutes baby spent in each of 8 types of equipment. Times were summed (Mdn = 150 mins) and normalized (square root) to create an Equipment Time variable (M=11.5, SD=5.4).

RESULTS
Equipment Time was the dependent variable in a Gender (2) by Month of Age (6) by Head Shape ANOVA (4). All effects were ns. Flattening is already present by 2 months, and there is no evidence for a link between equipment time and head flattening. However, there were unexpected and large country-to-country differences in the prevalence of flattening.

DISCUSSION
About a third of parents reported some flattening, mostly mild, and it was present by 2 months. Striking international differences may provide crucial clues about which factors are influential. Sequelae are unclear.

Selected References

Why are babies wearing helmets?
It’s a treatment for flat head syndrome or deformational plagiocephaly (DP) due to pressure on the malleable skull in the first months of life.

Recent evidence suggests high DP rates: of healthy Canadian 3- to 4-mo-olds, 47% had at least mild plagiocephaly at clinic visits (Mawji et al 2013).

What could cause this? The favored explanation is that babies are left too long on their backs to lower risk of SIDS. We suspected other factors.

Correspondence: Warren.Eaton@UManitoba.ca