



EXPLORING THE PREVALENCE OF POSITIONAL HEAD DEFORMATIONS IN A NEONATAL UNIT

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Background

Plagiocephaly, scaphocephaly, and brachycephaly make up a group of common, avoidable PHDs that can occur in babies, and those in a Neonatal Intensive Care or Special Care Unit such as the Grantley Stable Neonatal Unit (GSNU) at the Royal Brisbane and Women's Hospital (RBWH) are at particular risk.

Aims

1. To establish the prevalence of PHDs within the GSNU
2. To explore the impact PHDs have on families

Methods

A prospective audit was undertaken between November 2020 and January 2021. Cranial Index (CI) and Cranial Vault Asymmetry Index (CVAI) were established by taking four cranial measurements using a craniometer. Family surveys on separate GSNU graduates were undertaken in the same period.

Results

53 individual babies were identified as meeting inclusion criteria. Overall, Scaphocephaly was experienced by 52.8% of the cohort and some form of PHD was experienced by 66%. Due to sample size, only scaphocephaly could be assessed for risk factors and links were found between birth weight, GA, time in an isolette, and time on respiratory support. 10 families were interviewed and 80% reported that their baby's PHD had had some form of impact on their lives.

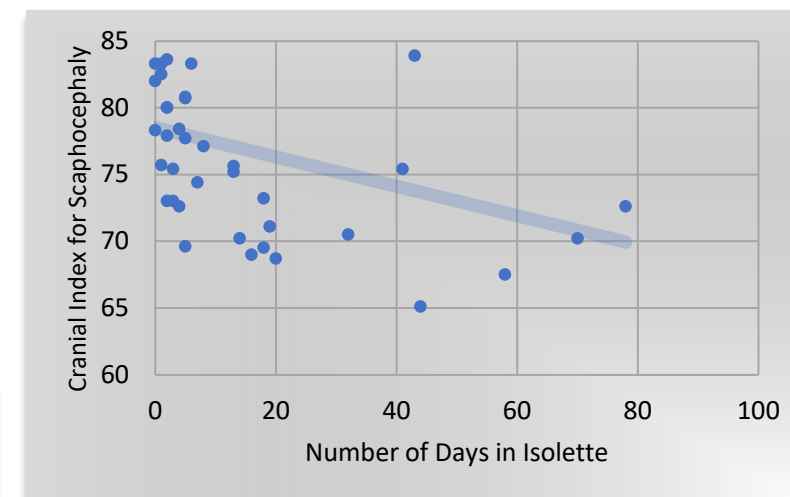
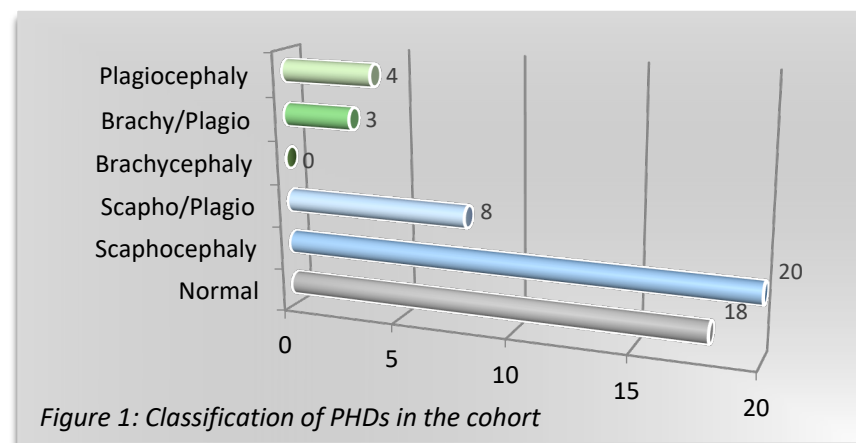


Figure 2: Impact on time spent in an isolette on scaphocephaly severity

Conclusions

The audit has found that a significant number of babies in GSNU experience a PHD. It is possible that new positioning guidelines may impact on the prevalence and severity of these.