Advice Note: Small anterior fontanel or early closure

Dear GP,

Thank you for your referral with concerns about this patient’s small anterior fontanelle / early closure.

The size of anterior fontanelle is highly variable and ranges from 0.6-4.6 cm in term babies. The age of closure is also variable and ranges from 8 to 24 months with median of 13 months. However, it is closed in 1% of healthy infants at 3 months of age, 3% at 5 months and increases to over 20% by 10 months.

Early closure of the anterior fontanelle is not uncommon in an otherwise healthy child. However, it should alert the examiner to the possibility of developing microcephaly.

Other (rare) causes of early closure of the anterior fontanelle include:

- Craniosynostosis
- Hyperthyroidism
- Hypophosphatasia
- Hyperparathyroidism

The approach to the child with early closure depends upon associated clinical findings, including ridging at the suture lines (suggestive of craniosynostosis), decreasing head circumference (suggestive of microcephaly) etc.

In cases of concern, it is very important to monitor head circumference and development carefully. This can be done in primary care.

Please do not hesitate to re-refer this patient if you have ongoing concerns.

Kind regards,

Hutt Paediatric Team