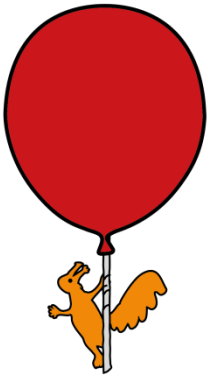


Alder Hey Children's NHS Foundation Trust

Liverpool Supraregional Craniofacial Team

Genetics of Trigonocephaly (Metopic Synostosis)

Information for parents

Introduction

The skull is made from different plates of bone which are separated by joints called sutures. These sutures allow the bones of the skull to overlap slightly so that the baby's head can pass through the birth canal during delivery. The sutures also allow for the brain to grow rapidly during the first two years of life. If one or more of the sutures fuse too early this is called craniosynostosis. Depending on which suture is affected, there will be a different head shape resulting from the craniosynostosis.

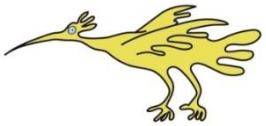
Trigonocephaly is the name given to the shape of the skull that occurs when the metopic suture (the joint on the skull which runs down the middle of the forehead) fuses too early. Trigonocephaly is only rarely syndromic (part of a wider condition), more commonly it is non-syndromic.

If there is no one else in the family with an unusual head shape, your child has no other medical problems or unusual features and has no problems with their development or growth, we would advise this was non-syndromic trigonocephaly.

What is the cause of my child's trigonocephaly?

We do not fully understand the cause of non-syndromic trigonocephaly. There is an increased chance of a child developing trigonocephaly when a mother has to take certain drugs for epilepsy during their pregnancy. In the vast majority of cases there is nothing about the pregnancy which is unusual and there is nothing a mother did or didn't do during the pregnancy which has caused the craniosynostosis. It is something that can happen to anyone.

Is there a chance that other children we may have in the future could have craniosynostosis?



Although non-syndromic trigonocephaly does not usually run in families there is a slightly increased chance that another child you have in the future may have craniosynostosis. This chance is about 2% (2 chances in 100) *(Lajeunie et al*, American Journal of Medical Genetics, 1998:75(2):2115. This means that there would be a 98% chance (98 chances in 100) that any child you had in the future would not have craniosynostosis.

There are no specific tests for craniosynostosis which would be offered during a future pregnancy and non-syndromic craniosynostosis is not usually detected on a 20 week anomaly scan. However, a scan later on in pregnancy may be able to check for signs of craniosynostosis. If a baby is affected, it may help doctors to decide on the best method of delivering the baby.

What is the chance of my child having a baby affected by craniosynostosis?

We currently suggest that there would be a low (but not zero). chance of them having a child with craniosynostosis themselves. Health professionals are likely to have a greater understanding of the causes of trigonocephaly in the future. We would recommend geneticist is contacted for information.

If you need further information please contact

Dr Emma McCann (emma.mccann@lwh.nhs.uk)

Consultant Clinical Geneticist
Liverpool Supraregional Craniofacial Team

Dr Astrid Weber (astrid.weber@lwh.nhs.uk)

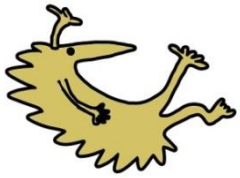
Consultant Clinical Geneticist
Liverpool Supraregional Craniofacial Team

This leaflet only gives general information. You must always discuss the individual treatment of your child with the appropriate member of staff. Do not rely on this leaflet alone for information about your child's treatment.

This information can be made available in other languages and formats if requested.

Alder Hey Children's NHS Foundation Trust
Alder Hey
Eaton Road
Liverpool
L12 2AP

Tel: 0151 228 4811
www.alderhey.nhs.uk



 Review Date: December 2021 **PIAG: 051**