Congenital Clasped Thumb in Children

This leaflet offers more information about the hand therapy treatment available for children with congenital clasped thumb. If you have any further questions or concerns, please speak to the staff member in charge of your care.

What is congenital clasped thumb and why has my child got it?
Congenital clasped thumb is also known as thumb-in-palm. It describes the position of the thumb being fixed in a bent position across the palm of the hand and that the thumb can only be straightened using another hand, i.e. the child cannot straighten the thumb using their own muscles.

It occurs due to either a weakness or an absence of the tendon-muscle units that straighten the thumb and is often seen in both hands.

It is still not clear why it occurs and is usually random however it can sometimes be associated with syndromes.

What are the signs and symptoms?
At birth it is common for the thumb to be bent across the palm and babies will often continue to hold their thumb in this position for many months. If it does not gradually release and open up over the first three to four months of life then it may be due to congenital clasped thumb.

It is also common for the skin between the thumb and index finger to be tight in congenital clasped thumb making it difficult to stretch the thumb away from the hand.

Do I need any tests to confirm the diagnosis?
It can be difficult to assess for congenital clasped thumb in the first three to four months of life as it can be normal for a child to grasp the thumb in the palm until then.

Usually diagnosis is confirmed through simple assessment by the consultant. They may arrange for an x-ray of the hand, although this is not always needed.

What treatments are available?
Hand therapy is normally the first line of treatment. If no improvement is seen with hand therapy interventions, then surgery may be considered.

Hand therapy involves massage, stretches and potentially your child wearing a splint that is moulded to the hand and thumb to stretch the thumb out straight.
Massage
Before stretching the thumb out straight, it can be helpful to massage the joints and tissues around the thumb to warm them up. Use a moisturising cream such as aqueous cream and rub it into the skin. Your therapist will show you where to massage on the thumb.

Use a firm pressure to massage but not so firm that it is painful for your child. You should never break or harm the skin itself with the massage.

Try to complete this ______ times a day for _____ minutes.

Stretches
After massage it can be helpful to use your own hand to stretch the affected thumb(s) out straight on your child. Try to hold the stretch for up to 30 seconds, as tolerated by your child.

The stretches should not be painful for your child, therefore do not worry if you cannot stretch the thumb out fully straight away. The combination of massage and stretches will gradually loosen tight structures over time.

Splint
A splint (supporting device) may be made for your child using a moldable plastic to hold the affected thumb(s) out straight. This will be custom-made for your child and will need regular reviews to ensure it is fitting well as your child grows.

The best results are seen when splinting starts before your child is six months old. The splint should be worn full-time for between three and six months, removing only for hygiene, massage and stretches.

If you notice any signs of the splint being uncomfortable, such as areas of tightness or rubbing, then please contact your hand therapist as soon as possible so that it can be reviewed. If you have any concerns, then stop wearing the splint until you see your therapist.

Surgery
If there is no improvement with massage, stretches and splinting over a three to six month period then surgery may be suggested.

Your consultant plastic surgeon will discuss the options of surgery, including the risks and benefits of choosing to go ahead with an operation.

What happens if I do not get treatment?
Without treatment, the thumb may become stiff in a bent position meaning your child will not be able to use the thumb in day-to-day use. Early assessment and starting of treatment can promote the best results from treatment.

Useful sources of information
British Society for Surgery to the Hand
https://www.bssh.ac.uk

REACH, the support group for children with congenital arm and hand problems
http://www.reach.org.uk
Tel. 0845 130 6225
Contact us
If you have any questions or concerns about congenital clasped thumb, please contact the hand therapy department on 020 8725 1038 (Monday to Friday, 8am to 5pm) or the plastic surgery department on 020 8725 1134 (Monday to Friday, 9am to 5pm).

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.stgeorges.nhs.uk

Additional services

Patient Advice and Liaison Service (PALS)
PALS can offer you on-the-spot advice and information when you have comments or concerns about our services or the care you have received. You can visit the PALS office between 9.30am and 4.30pm, Monday to Friday in the main corridor between Grosvenor and Lanesborough Wing (near the lift foyer).
Tel: 020 8725 2453   Email: pals@stgeorges.nhs.uk

NHS Choices
NHS Choices provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health.
Web: www.nhs.uk

NHS 111
You can call 111 when you need medical help fast but it’s not a 999 emergency. NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones.
Tel: 111