WHY WOULD MY CHILD NEED THIS PROCEDURE?

This procedure is carried out in children with:
A) Varus or “bowed leg deformity” and B) Valgus or “knock-knee deformity”.

WHAT IS A PHYSEAL GROWTH PLATE?

The long bones in our body are made up of parts called the metaphysis, diaphysis and epiphysis. The epiphysis is separated from the metaphysis by a cartilage layer called the physis, commonly known as the growth plate.

HOW DOES AN EIGHT PLATE ACTUALLY WORK?

The plate temporarily restrains growth on one side of the growth plate while natural growth is allowed to continue on the opposite side. Gradually over time, the deformity is slowly corrected. This can be anywhere from several months to one year. Your child needs to be closely monitored and will be seen by their surgeon every three months. When the deformity is corrected, your child will then be scheduled for plate removal under general anaesthetic as a day case procedure. If growth is completed, it is possible to leave the plate in position; however occasionally the plate causes minor problems and may need to be removed.

WHAT DOES THE OPERATION INVOLVE?

Implantation of the eight plate, is performed under general anaesthetic, usually as a day case procedure. If your child is having both limbs operated on, they may be required to stay in hospital overnight. They will have a skin incision of 2-3cm over the bone at the level of the growth plate. The eight plate is secured to the bone with two titanium screws. For “knock-knees” or valgus deformity, the plate is placed at the medial side of the physeal plate (inner side) and for “bowed legs” or varus deformity, the plate is placed on the lateral side (outer side).

ARE THERE ANY RISKS WITH THIS PROCEDURE?

As with all surgical procedures, there are risks of infection and bleeding at the wound site. Your hospital nurse will show you how to care for the wound at home.

Occasionally, the operation will fail to correct the deformity by failing to slow the growth plate. If this happens then the surgery may need to be repeated.
ADVICE BEFORE DISCHARGE

PAIN RELIEF

- You will be given a leaflet informing you of the times to administer pain relief. Pain relief should be given at regular intervals until your child is comfortable and pain free.

WOUND CARE:

- The sutures in the skin are dissolvable. In addition there will be paper stitches called steri-strips and a small dressing covering the wound. This is then covered with a large pressure bandage.
- Keep the wound dry for ………days (i.e. no baths or showers) and then all the dressings except the steri-strips may be removed.
- Allow the steri-strips to fall off or remove after 10-14 days, if they are still present.

FOLLOW UP

- Ensure you have your return clinic appointment date before you leave the hospital.

ACTIVITIES

Your child can return to normal activities as soon as they feel able. There are no restrictions with sports. Your child will not need crutches.

WHEN DO I RETURN TO HOSPITAL AND WHEN WILL I SEE THE RESULTS OF THE PROCEDURE?

Your child will be seen after surgery, in the out-patients clinic, one month after surgery. The surgeon will check the wound site. Your child will then be seen at three monthly intervals in out-patients, to monitor the change in the shape of your child's limb. You will not see the results of the treatment for some time (average 6-18 months)

For more information on Guided Growth (Eight Plates), please contact Clinical Nurse Specialist, Limb Construction, Phone: 01 409 6100 - Bleep 8754 (Mon – Fri). All other times, or CNSp unavailable. Ring Orthopaedic Doctor on call: 01 409 6100

Remember: Ask your nurse if you are unsure about anything about your child’s care.

Additional instructions