

# Breuninger surgery

in children



*Breuninger surgery is a technique in which a skin tumor is removed in multiple surgical sessions. This minimizes the size of the wound and reduces the likelihood that the tumor will come back. You and your child have had an appointment with a dermatologist/pediatric dermatologist, pediatrician/pediatric oncologist and/or pediatric surgeon about the procedure at the multidisciplinary skin cancer outpatient clinic (MDST). We realize that the information you received may be overwhelming or not completely clear, which is why we have outlined the information for you here. Please be aware that the admission to hospital and the surgery could be slightly different to the procedure mentioned below.*

## Preperations

### *Pre-operative clinic*

You and your child will meet the anesthesiologist (the sleep doctor) at the pre-operative clinic. Just before surgery, the anesthesiologist will give your child medication to fall asleep. They will take care of your child during the operation and will wake your child after surgery has been completed. During this meeting the anesthesiologist will ask:

- about your child's general health
- whether there are any details that may be important for the anesthesia
- whether your child is allergic to any substances
- whether your child is on medication or a diet
- whether your child has previously undergone surgery and how he/she reacted to the anesthetic

### *Medication*

If your child is on medication, the anesthesiologist will let you know which medication your child may continue to use and which ones he/she must stop using before surgery.

### *Fasting and eating*

The anesthesiologist will inform you about fasting. Your child may eat and drink as normal on the day before surgery. It is important that your child drinks at least 1.5 liters. Your child may have a light evening meal up to 8 hours before surgery. After this he/she must fast. This means that your child must not eat or drink anything and may only drink 100 ml of clear fluids per hour until the surgery takes place.

### *Admission*

Your child will usually not be admitted to the hospital until the morning of the operation (Pediatric Surgical ward 1 south) and can go home a few hours after the procedure. You will find more information about hospital admissions at [www.erasmusmc.nl](http://www.erasmusmc.nl). On the day of the procedure you will usually first have an admission appointment and your child will undergo several tests.



## About Breuninger surgery

Breuninger surgery is a technique in which a skin tumor is removed in multiple surgical sessions. The edges of the skin tumor tissue will be examined under a microscope after each surgical session. The removal of the cancer cells in this very precise way means that the wound will be as small as possible at the end of the procedure. In addition, it reduces the likelihood that the tumor will come back.

The surgeon will draw a line around the skin tumor before the first operation. The dermatologist and the pediatric surgeon will remove the skin tumor as best as possible during surgery. After surgery, the skin tumor tissue is sent to the pathologist.

If the pathologist finds any tumor cells left at the edges of the tissue, the dermatologist and the pediatric surgeon will remove these during a second operation. This will take place one week after the first procedure. This tissue will again be examined by the pathologist, and if there are any tumor cells left they will again be removed a week later. This procedure will be repeated until the pathologist is sure that the edges are clean. This will be followed by one last operation in which the wound is closed. This is called reconstruction.

If the wound is too large or is difficult to treat, a plastic surgeon will help close the wound. This will be discussed with you and your child beforehand. We will keep the wound open between the surgery sessions, but of course we will dress the wound with bandages.

## General anesthesia

Your child will go under general anesthesia during all the operations.

## After surgery

The anesthesiologist will determine when your child is ready to return to the hospital room. A nurse will accompany your child to the room.

### *Check-ups*

We will keep a close eye on your child after surgery. The pediatric nurses will check your child's vital parameters (heart rate, respiration, temperature, and blood pressure) and will ensure that the necessary medication is administered in time.

### *Eating and drinking*

It is important that your child gets enough nutrients after surgery for the wound to heal and to maintain/develop muscle strength and resistance. Proteins are particularly important.

### *Wound*

The wound is covered with bandages which must not be removed until the next appointment. Both the wound and the bandages must be kept dry. Checking the wound in between appointments is usually not necessary. The bandages will be replaced after the next surgery or the closing of the wound.



### *Intravenous drips*

Your child will have at least one drip to provide him/her with fluids and medication during and after surgery, which we will gradually cut back. The drip will be removed as soon as your child is able to drink and no longer needs pain or other medication through the drip.

### *Pain medication*

Your child will often recover faster if given the right pain medication. The anesthesiologist will determine which pain relief is best for your child.

## **Complications**

The likelihood of complications after surgery is very minor. But no operation is without risks. Risks after surgery can include postoperative bleeding, a wound infection, or severing a nerve. The team performing the surgery is specialized in preventing these problems as much as possible and in treating them.

The risk of postoperative bleeding is greatest in the first 24 hours after surgery. If the wound does start to bleed, press a clean tea towel firmly against the wound for 15 minutes. If this does not stop the bleeding, please contact the Pediatric Surgery outpatient clinic. You can find their telephone number under 'Contact details'.

If your child develops a fever, shivers, or if the wound looks red around the edges and discharges pus it means the wound may be infected. In this case, contact the Pediatric Surgery outpatient clinic.

## **Contact details**

- Pediatric Surgery outpatient clinic (010) 703 62 40 (from Monday to Friday, 8 am to 4:30 pm)
- Erasmus MC's Emergency department (010) 704 01 45 (for emergencies outside office hours)





