

DECOMPRESSIVE HEMICRANIECTOMY

WHAT IS A DECOMPRESSIVE HEMICRANIECTOMY (DCH)?

- A DCH is a surgery that is done to allow the brain to swell. In this surgery, a large part of the skull is removed and the skin is closed back up again. When the patient comes back from surgery, you may notice that one side of the brain appears larger than the other. This is expected, since the brain is swelling.

WHAT HAPPENS TO THE BONE AFTER IT IS REMOVED?

- The bone is frozen and sent to the California Tissue and Donor Network in southern California. It is swabbed for a culture before being sent to make sure the bone does not contain any infection. It will be stored there until the time comes to replace the bone.

I'VE NOTICED THE SIDE WITHOUT THE BONE LOOKS SUNKEN AT TIMES AND BULGING AT OTHER TIMES, IS THIS NORMAL?

- Yes, as the brain heals and the fluids shift, the skin flap can appear sunken or full. Depending on which position the patient's head is in, the brain and the fluid that surrounds the brain can move around making the skin flap change in its appearance.

CAN THE PATIENT GET OUT OF BED AND WALK AROUND WITHOUT THE BONE?

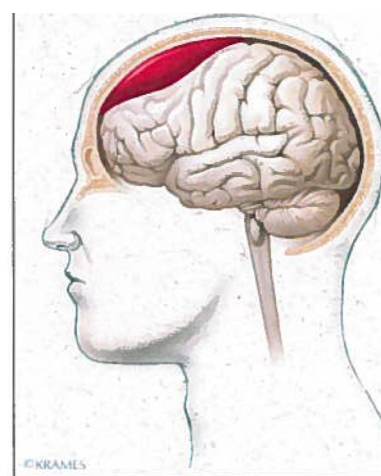
- Yes, the patient will be provided with a helmet that should be worn whenever he/she is out of bed. This will protect the brain until the bone is replaced. The patient does not need to wear the helmet when he/she is in bed.

CAN THE PATIENT SHOWER OR BATHE WITHOUT THE BONE?

- If the patient becomes dizzy or unsteady on his feet, a bath is preferred. The head can be wet and shampooed with baby shampoo. A light wash cloth can be used to wash the incision, but you should not scrub the incision. The head should not be soaked in the water either. The dry gently with a clean towel. Do not use a hair dryer on the incision or any hair products.

WHAT CAN BE DONE TO PREVENT INFECTION AND PROMOTE HEALING?

Many things affect whether or not a person gets an infection. Some things that a patient can do to prevent infections are:



The brain needs room to swell

- Do not scratch or pick at the incision. As the skin heals, it can itch. Scratching the incision can introduce bacteria from under the fingernails into the healing skin and cause an infection. If you notice the patient scratching his wound, please let the nurse know and redirect the patient's hands to another activity. The nurse may need to place a cranial cap or mittens on the patient until he/she can remember not to scratch on his/her own.
- Do not smoke cigarettes. Nicotine keeps the small blood vessels from growing. These blood vessels are essential to bring the nutrients the skin needs to the healing tissue. A nicotine patch has the same effect on growing blood vessels and will be avoided if possible.
- Do not lie on the incision. Pressure on the incision keeps the blood from getting to the healing skin. Keeping patients positioned off of the incision allows for maximal blood flow to the healing skin. When visiting the patient, try to sit on the side of the patient with the bone intact so that they will look towards that side and avoid laying on the side with the incision.
- Eat a healthy diet. Eating a well balanced, nutritious diet provides all of the nutrients the skin needs to heal well. Keeping the sugar levels in the blood at a health level romotes ood skin growth. A multivitamin might be given until the incision is well healed.
- Take a walk every day. If the patient is able to walk, it is good for him to do so daily. The exercise will increase the blood flow to the skin bringing all of the nutrients the skin needs to heal and take away all of the debris it no longer needs.

WHEN WILL THE BONE BE REPLACED?

- The typical time frame is between 3 to 6 months after the bone is removed. The main reasons to wait so long are to decrease the likelihood of infection and complications.
- When the bone is removed, a gel film is placed over the brain. Over time, this film changes into a covering that protects the brain. It takes time for this to happen. When the second surgery is done to replace the bone, this covering, called a pseudodura, acts as a barrier that protects the brain from getting irritated.
- The patient will need to be free from infection. The skin will need to be well healed without any sores around it. There can't be any urinary tract infections or respiratory infections.



Eat a healthy diet.

HOW DO WE GET THE BONE IF WE DO NOT HAVE IT REPLACED AT SAN FRANCISCO GENERAL HOSPITAL?

- The California Tissue and Donor Network can be contacted at 1-800-928-4778
- Provide the patient's name, medical record number at SFGH, and the Trauma Name, if applicable