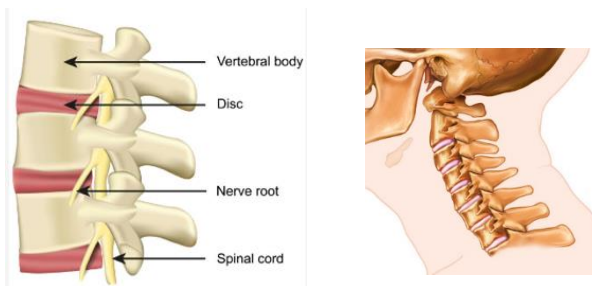


# Neck injury and halo

## The neck and spine



**Neck made of bones of the spine call vertebrae**

Muscles, tendons and ligaments attach to the vertebrae. They all work together to:

- Protect the spinal cord.
- Support the head.
- Allow movement in the neck.

The neck also has:

- Major blood vessels that carry blood to and from the head and brain.
- The spinal cord that controls all body movements and sensations.
- The trachea called the wind pipe that brings air in and out of lungs.
- The esophagus called the food tube that allows food and water to reach the stomach.

## Immobilizing the neck with the halo



Immobilizing means to keep the neck from moving. After an injury, the most important part of healing is keeping the neck as still as possible.

The halo is the best device for limiting free movement of the neck and protecting the cervical spine.

- The halo is a carbon fiber that surrounds the child's head. It has a ring, pins, and support rods. It also has a vest and sheepskin.
- We place the halo in surgery and secure the carbon fiber to the skull with pins.



**Picture of a halo with vest**

***Important: Never pick your child up by the rods, the vest, or the skull halo ring.***

Goals for using the halo:

- To support the neck and head.
- To decrease the pain and inflammation.
- To keep the neck straight. This is the best position for healing.
- To keep the neck still. Moving the neck can increase the pain and slow down the healing.
- To prevent further damage to the injured tissues in the neck.

## What to know when you go home

### Custom fit

We fit the vest to your child's size. It is important to keep your child's neck still and straight without any moving or tilting. We will teach you where to place the straps and how to secure them.

### Pain management

The neurosurgery or trauma team will develop a plan for taking care of your child's pain while in the hospital and at home.

### Daily pin care

Clean around pins with ½ strength hydrogen peroxide and Q-tips. Use a clean Q-tip each time. Check skin around pins for crusting, redness, swelling, drainage, or loosening.

### Hair washing:

We will teach you how to wash your child's hair before you go home.

### Getting out of bed and moving around

The halo may change your child's sense of balance. This will increase the risk of falls. Our team will teach you and your child how to safely get out of bed and move around.

### Restricted activity

Your child can only do activities that will not hurt their neck or put it at risk for more injury.

- Do not allow your child to play sports or exercise.
- Do not take part in any type of athletics or physical education program such as gym class.
- Do not rough play or do any vigorous activity.

Your neurosurgery team will tell you when you can safely return to usual activities.

### Sponge bath only when needed



No soaking in the tub. No showers.

Sponge bath for chest and back:

- Do not open any straps or buckles.
- Only use a damp cloth, not wet.
- Use warm water only. No Soap.

## Keep objects from falling into vest

This may include small toys, foods, or fluids.

## Skin under sheepskin liner

Carefully slide your flat hand between the vest and your child's skin. Clean and pat dry skin.

- Check skin for rashes, swelling, irritation, bruises, or tenderness.
- Do not use lotions or oils under liner.

## Caring for your child's sheepskin

### ***Do not open any straps or buckles.***

Change the sheepskin when it gets dirty or wet.



If sheepskin gets "a little wet" you may use a blow dryer on COOL setting. If unable to dry area, change the sheepskin.

The front and back liners are different.

- Front liner: Have child lay on back.
- Back liner: Have child lay face down.

## Changing the sheepskin

Start from the bottom edge of the halo vest. Slide a clean pillowcase up between sheepskin liner and vest. This keeps Velcro from sticking together.

1. Slide dirty sheepskin out of bottom of vest.
2. Clean and gently dry the skin as needed.
3. Slide new sheepskin up between your child and the vest. Make sure clean liner matches up with shape of the dirty liner.

4. Slide the pillowcase back out.
5. Press sheepskin liner on the vest and make sure it firmly attaches to the Velcro.

## Cleaning the sheepskin

Do not put the sheepskin in the washer. Hand wash or dry clean only. You can use a mild detergent if needed.



Air dry the sheepskin. Heat will damage the material. Do not use a dryer.

## When to call your doctor

- Pain is getting worse.
- Skin irritation under vest does not heal.
- Swelling, redness, drainage, around pins.
- Pins seem loose.
- Numbness, tingling or weakness in any part of body.

Follow-up appointment:

We will schedule all follow-up appointments before you go home.

## Halo questions or problems

Neurosurgery: 682-885-2500

Cook Children's Home Health Orthotics:

682-885-6295

Call for:

- Any questions about the halo.
- Any concerns about the fit of the halo.
- Extra sheepskin liners.

## For a cardiac emergency

1. Lie child flat on a firm surface, face up.
2. Open waist buckles.
3. Place one hand firmly on front of vest just above narrow mid-section.
4. Use other hand to bend up lower half of vest to be able to reach the sternum to perform chest compressions.
5. Replace halo vest after the emergency

## Notes

These instructions are only general guidelines. Your health care provider may give you special instructions. If you have questions or concerns, please call your health care provider.

**The healthcare provider talked to me about the information in this handout.**

- I know what I need to do.
- I know why doing this is important.
- All my questions have been answered.
- I have a copy of this handout.

\_\_\_\_\_  
**Patient Name**

\_\_\_\_\_  
**Patient, Parent, or Legally Authorized Representative**

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Signed Name

\_\_\_\_\_  
Your Relationship to the Patient

\_\_\_\_\_  
Date

\_\_\_\_\_  
Time a.m. / p.m.

\_\_\_\_\_  
**For staff use only**  
\_\_\_\_\_

## Neck-injury-halo

### Healthcare Provider

\_\_\_\_\_  
MRN (Medical Record Number)

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Signed Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Time a.m. / p.m.

### Interpreter

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Signed Name

\_\_\_\_\_  
Interpreter Number

\_\_\_\_\_  
Date

\_\_\_\_\_  
Time a.m. / p.m.

Print or imprint Patient Information

MRN \_\_\_\_\_

CSN \_\_\_\_\_

