

# Head Injury - Pediatric

## WHAT IS A HEAD INJURY?

There are three main types of head injuries:

- **Scalp injury:**

Most head injuries are a scalp injury. It is common for children to fall or hit their head at some point while growing up. This is especially common when a child is learning to walk. Falls often cause a bruise on the forehead. Sometimes black eyes appear one to three days later because the bruising spreads downward by gravity. Big lumps can occur with minor injuries because there is a large blood supply to the scalp. For the same reason, small cuts on the head may bleed a lot.

- **Skull fracture:**

Head injuries that you can't see on the outside of the head may involve a skull fracture or a concussion. Only one to two per cent of children with head injuries will get a skull fracture. Usually there are no other symptoms of skull fracture except for a headache where the head was hit.

- **Concussion:**

A concussion is a mild injury to the brain that changes how the brain normally works. It is usually caused by a sudden blow or jolt to the head. Many children bump or hit their heads without causing a concussion. Signs of a concussion can include headache, nausea, vomiting, dizziness, confusion, forgetting what happened around the time of the injury, acting dazed, or being knocked out. A person does NOT need to be knocked out or lose consciousness to have had a concussion.

If your child has a concussion, there may be some ongoing symptoms such as mild headaches, dizziness, thinking difficulties, or behavioural/emotional changes for several days to weeks. All children with a concussion will need to have follow-up with their health-care provider.

## TREATMENT ADVICE TO TAKE CARE OF YOUR CHILD

- **Wound care**

If the skin is split open and might need stitches, see a health-care provider right away. If there is a scrape, wash it off with soap and water. Then apply pressure with a clean cloth (sterile gauze if you have it) for 10 minutes to stop any bleeding. For any small cuts, apply over-the-counter antibiotic ointment, such as polysporin, twice a day until healed. For swelling, apply a cloth covered cold pack or ice bag for 20 minutes. This will also reduce pain.

- **Rest**

Encourage your child to lie down and rest until all symptoms have cleared (or at least two hours). Your child can be allowed to sleep. You do not need to try to keep your child awake continuously. Just have them sleep nearby so you can periodically check on them.

- **Diet**

Only give clear fluids (ones you can see through) until your child has gone two hours without vomiting. Vomiting is common after head injuries.

- **Pain medicines**

After two hours have passed without vomiting, you can give acetaminophen (Tylenol) or ibuprofen (Advil), as needed for pain relief. Caution: wait 2 hours to be sure your child isn't going to vomit from the head injury before giving any medication.

- **Special precautions and awakening**

Although your child is probably fine, watch him or her closely for 48 hours after the injury. Sleep in the same room with them for the first two nights after the injury. That way, if they develop any symptoms, you will be nearby. Awakening them to check the ability to walk and talk is optional, unless their breathing or sleep pattern becomes abnormal or they are sleeping longer than normal. If your child does fine for 48 hours, return to a normal routine.

It is not necessary to check your child's pupils to make sure they are equal in size and become smaller when you shine a flashlight on them. Unequal pupils are never seen before other symptoms such as confusion and trouble walking. In addition, this test is difficult to perform with uncooperative children or dark-colored irises.

- **Returning to sports**

Children with a concussion should not return to sports activities or gym until your health-care provider says it is alright and your child no longer has any symptoms. If your child returns too soon and has another blow to the head he or she can develop another concussion and have an increased risk of further brain injury.

## WHEN SHOULD I SEE A HEALTH-CARE PROVIDER?

### SEE A HEALTH-CARE PROVIDER IMMEDIATELY if:

- The skin is split open and likely needs stitches
- The headache becomes severe
- Vomiting occurs 2 or more separate times
- Your child's vision becomes blurred or double
- Your child becomes difficult to awaken or confused
- Walking or talking becomes difficult
- Your child develops other new symptoms
- The fall was from a dangerous height or speed
- An infant has a strike to the head, such as from falling from a bed onto their head

If you haven't spoken to us yet, call Health Links – Info Santé to discuss your child's symptoms with a nurse. Call back any time if your condition changes and you need assessment, or you have any questions or concerns.

*Written by Barton D. Schmitt, MD, author of "My Child Is Sick," American Academy of Pediatrics Books.*

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