# **Head Injury**

### Definition

- Injuries to the head
- Includes the scalp, skull and brain

# Health Information

#### **Types of Head Injuries**

• Scalp Injury. Most head injuries only damage the scalp. Examples are a cut, scrape, bruise or swelling. It is common for children to fall and hit their head while growing up. This is especially common when a child is learning to walk. Big lumps (bruises) can occur with minor injuries. This is because there is a large blood supply to the scalp. For the same reason, small cuts on the head may bleed a lot. Bruises on the forehead sometimes cause black eyes 1 to 3 days later. This is caused by blood spreading downward by gravity.

• **Skull Fracture.** Only 1% to 2% of children with head injuries will get a skull fracture. Most often, there are no other symptoms except for a headache. The headache occurs at the site where the head was hit. Most skull fractures occur without any injury to the brain. They heal easily.

• **Concussion.** A concussion is a type of brain injury. It causes a temporary change in how the brain works. It is usually caused by a sudden blow or jolt to the head. Most children bump or hit their heads without causing a concussion. The most common signs are a brief period of confusion or memory loss. This happens after the injury. Other signs of a concussion can include a headache or vomiting. Dizziness, acting dazed, or being knocked out can also be signs. A person does NOT need to be knocked out to have had a concussion. Following a concussion, some children have ongoing symptoms. These can include mild headaches, dizziness or thinking difficulties. School problems or emotional changes can occur. These symptoms can last for several weeks.

• Brain Injuries are uncommon, but are an emergency.

#### Symptoms of a Brain Injury

- Hard to wake up or keep awake OR
- Acts or talks confused OR
- Slurred speech OR
- Weakness of arms or legs OR
- Walking is not steady
- Any of these symptoms are an emergency. If they happen, call 911.

#### Symptoms of a Minor Head Injury

- The main symptom is pain.
- The scalp may bleed a little or develop a lump.

#### Prevention

- Careful adult supervision of young children
- Education of older children about high risk behaviors

### Care Advice

#### 1. Overview:

• Most head injuries only cause a swelling or bruise to the scalp. The main symptom is pain where the head was injured.

- The skull bone protects the brain from getting injured.
- Big lumps or bruising can occur with minor injuries to the scalp. This is normal. Reason: The scalp has a large blood supply.
- Swelling of the scalp does not mean there is any swelling of the brain. The scalp and brain are not connected. They are separated by the skull bone.
- The mildest brain injury is a concussion. Most of those also turn out fine.
- Here is some care advice that should help.

#### 2. Wound Care:

- If there is a scrape or cut, wash it off with soap and water.
- For any bleeding, put direct pressure on the wound. Use a gauze pad or clean cloth. Press for 10 minutes or until the bleeding has stopped.

#### 3. Cold Pack:

- Use a cold pack or ice bag wrapped in a wet cloth. Put it on any swelling. Do this for 20 minutes.
- Reason: Prevent big lumps ("goose eggs"). Also, helps with the pain.
- Repeat in 1 hour, then as needed.

#### 4. Watch Your Child:

• Watch your child closely during the first 2 hours after the injury.

• Have your child lie down and rest until all symptoms have cleared. (Note: Mild headache, mild dizziness and nausea are common.)

- Allow your child to sleep if he wants to, but keep him nearby.
- Wake him up after 2 hours of sleeping. Check that he is alert and knows who you are. Also check that he can talk and walk normally.

#### 5. Diet:

- Offer only clear fluids to drink, in case he vomits. Allow a regular diet after 2 hours.
- Exception: Babies can continue breast feeding or formula.

#### 6. Pain Medicine:

- To help with the pain, give acetaminophen (such as Tylenol) or ibuprofen. Use as needed.
- Exception: Do not give until 2 hours have passed from injury without any vomiting.
- Never give aspirin to children and teens. Reason: increases risk of bleeding.

#### 7. Special Precautions for One Night:

- Mainly, sleep in same room as your child for the first night.
- Reason: If a problem occurs, you will recognize it if you are close by. Problems include a bad headache, vomiting or confusion. Also, look for any change in your child's normal behavior.
- Option: If you are worried, wake your child once during the night. Check how he walks and talks.
- After 24 hours, return to a normal sleep routine.

#### 8. What to Expect:

- Most head trauma only causes an injury to the scalp.
- The headache at the site of impact gets better in 2 to 3 days.
- The swelling may take a week to go away.

## Call Your Doctor If

- Pain or crying becomes severe
- Vomits 2 or more times
- Your child becomes hard to wake up or confused
- Walking or talking is not normal
- You think your child needs to be seen
- Your child becomes worse

#### **Pediatric Care Advice**

Author: Barton Schmitt MD, FAAP Copyright 2000-2022 Schmitt Pediatric Guidelines LLC

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