Managing Fractures in children with Osteogenesis Imperfecta

Advice for Schools

It is important that any adult who looks after a child with osteogenesis imperfecta (OI) understands the first aid treatment and management of fractures.
One of the main concerns in OI is the increased risk of breaking a bone and the subsequent time spent in pain or with reduced mobility.

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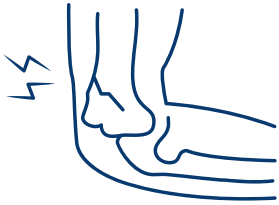
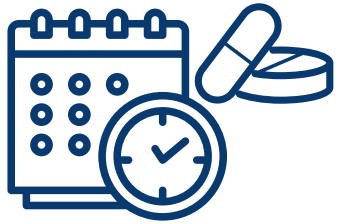


The medical term for a broken bone is 'fracture', this is not different from a 'crack', 'crush' or 'break' – all of these are known as fractures. Any bone can be susceptible to a fracture, including the individual bones of the spine known as the vertebrae. Bones usually break when unusual stresses and strains are placed on the bone such as a twist or a fall; however fractures may occur from repetitive minor traumas (stress fractures) or from little or no apparent cause.

All suspected or actual fractures should be examined and treated by the child's doctor/ hospital or an orthopaedic specialist. If a fracture is suspected, then an ambulance should be called and/or the child should be taken to A and E. If a fracture is suspected at school, first aid procedures should be applied and the parent/carer contacted.

Every child with OI should have a health care plan at school which:

- Details the student's specific health care needs
- Describes agreed actions to meet these needs
- Lists emergency phone numbers for ambulance, parent, and an emergency contact
- Details an emergency care/response plan
- Identifies the key people and their responsibilities
- Includes a schedule for the administration of prescribed medication



Signs to look out for:

The school age child should be able to tell you that they have pain and point to a particular site. A child may experience some or all of the following signs following a fracture:

- Swelling, bruising, tenderness, pins and needles sensation
- Child may be pale and sweaty
- Painful to put weight through an arm or leg, e.g. on standing
- Pain on movement
- Child stops moving an arm or leg
- Change in bone shape/alignment
- Child may not always cry
- Change in child's normal behaviour
- Child may become quiet and withdrawn
- Limping

Sprains may also result in some of the signs above. It may be helpful to discuss with parents what specific signs to look out for and include these in the child's health care plan.

In the event of an injury:

- Follow the school first aid procedures.
- Stay calm and reassuring for the child.
- As agreed in the child's health care plan, make contact with parents and emergency services as needed.
- Listen to the child – they usually know if they have fractured anything. Sometimes there is no obvious sign of a fracture, so until proven otherwise the child should be treated as though there is a fracture.
- Assess child for potential injury. Check for signs of fracture.
- Keep the child comfortable, don't move them unnecessarily unless they are in danger.
- If it is an arm, wrist or collar bone that is suspected of being broken, it may be more comfortable if the arm is supported against the body.
- If it is a suspected leg fracture or back/neck injury it is best to keep the child still and comfortable until the ambulance/parents arrive.
- Have only the necessary amount of people involved.
- Use distraction to help the child deal with the pain.

Notes

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Compiled by the Brittle Bone Society in collaboration with BBS Medical Advisory Board and POINT (Paediatric Osteogenesis Imperfecta National Team). The information in this leaflet is correct as at 31st July 2021 but we cannot guarantee that it will be accurate and current at any given time. This leaflet is not intended in any way to replace the advice of your doctor or other medical professional. Leaflets are available online at www.brittlebone.org. This information is available in accessible formats on request.

The Brittle Bone Society (BBS) is a registered charity in Scotland (SCO50854) and company limited by guarantee (SC677346), supporting the OI community throughout the United Kingdom and in Ireland.