



Brittle Bone Disease/ Osteogenesis Imperfecta

Osteogenesis Imperfecta (OI) is a disorder which causes the bones to break easily. It is also called "brittle bone disease." OI affects a person throughout his lifetime.

At this time, there is no cure. OI is caused by a mutation on a gene that affects the body's production of the collagen found in bones and other tissues. OI is not caused by too little calcium or poor nutrition.

OI can be mild to severe. A person with mild OI may experience a few fractures while those with the severe forms may have many in a lifetime.

CAUSES AND RISK FACTORS

Osteogenesis Imperfecta is an inherited disorder.

SYMPTOMS AND TYPES

Symptoms may include:

- Fractures
- Fatigue
- Short stature
- Discoloration of the white part of the eyes (blue sclerae)
- Brittle, discolored teeth (dentinogenesis imperfecta)
- Curvature of the spine (scoliosis) and curved bones
- Bowing of limbs
- Inability to tolerate heat
- Weak tissues, fragile skin, muscle weakness and loose joints
- Hearing loss beginning in early adulthood
- Breathing problems, higher incidence of asthma plus risk for other lung problems
- Bleeding, easy bruising, frequent nosebleeds and, in a small number of people, heavy bleeding from injuries.

DIAGNOSIS AND TESTS

Doctors may use X-rays, genetic testing or a family tree analysis to diagnose OI. Before an appropriate diagnosis is made this disease can be mistaken for child abuse.

TREATMENT AND CARE

Treatment may include:

- Splints or wraps for broken bones with occasional use of casts
- Braces to support legs, ankles, knees and wrists as needed
- Orthopedic surgery, often including implanting rods to support the long bones in arms or legs
- Use of mobility aids such as canes, walkers, or wheelchairs and other equipment or aids for independence may to compensate for weakness or short stature
- Medications to strengthen bones
- Physical therapy and safe non-contact exercise

LIVING AND MANAGING

Despite the challenges of managing OI, most people lead productive and successful lives.



**Need an appointment or have questions?
Call 832-822- 3100 for the Main Campus Clinic and
Health Centers.
For our West Campus location, call 832-227-7678.**