

bisphosphonate therapy is reportedly more beneficial for increasing vertebral bone density and less effective for long bones ([Marini, 2016](#)).

The goals of a rehabilitative approach to management are directed toward preventing (1) positional contractures and deformities, (2) muscle weakness and osteoporosis, and (3) malalignment of lower extremity joints prohibiting weight bearing. Lightweight braces and splints help support limbs, prevent fractures, and aid in ambulation. Physical therapy helps prevent disuse osteoporosis and strengthens muscles, which in turn improves bone density. Surgery is sometimes used to help treat the manifestations of the disease. Surgical techniques are used to prevent or correct deformities that interfere with bracing, standing, or walking. The placement of intramedullary rods into the long bones can provide stability to bone, as well as prevent or correct deformities.

Nursing Care Management

Infants and children with this disorder require careful handling to prevent fractures. They must be supported when they are being turned, positioned, moved, and held. Even changing a diaper may cause a fracture in severely affected infants. These children should never be held by the ankles when being diapered but should be gently lifted by the buttocks or supported with pillows. However, nurses should not be afraid to touch or handle the infant or child with OI. Such children need compassionate handling and care as much as any other patient.

Both parents and the affected child need education regarding the child's limitations and guidelines in planning suitable activities that promote optimal development and protect the child from harm. Realistic occupational planning and genetic counseling are part of the long-term goals of care. Educational materials and information can be obtained from the Osteogenesis Imperfecta Foundation,^{*} which also has a network that places families in contact with other families with a similar condition.

Children with current fractures or healing fractures should be screened for OI; the assumption that abuse or neglect is the cause of fractures in children must be carefully evaluated by a multidisciplinary team. A detailed history, no evidence of