

Bowed Legs

What is bowed legs?

Bowing of the legs is seen in a child when there is increased space between the knees with the feet together and facing forward while standing. The bowing may be in one leg or in both. It is especially noticeable while the child runs. This is very common during toddler years and is occasionally seen in adolescents who are typically overweight.



What causes bowed legs?

For children who are under two years of age, bowing of the legs is a normal variant. As the child grows, the bowing should gradually improve beginning at about eighteen months of age. Physicians call this type of bowed legs genu varum. By age of three to four, the child's legs should have a normal appearance. Blount's Disease is another type of bowing of the legs. This bowing is abnormal. The cause is from an irregularity at the growth plate at the top of tibia. Blount's disease can be seen in toddlers and adolescents. Radiographs taken at about age 3 can show problems at the growth plate in Blount's Disease.

Rickets is another disorder that can cause bowing in the legs of children. Rickets is a disease of the bone in which children do not get sufficient amount of Calcium, Phosphorus, or Vitamin D. Nutritional rickets is more often associated with underdeveloped countries where children cannot get the needed amount of dairy products. Nutritional rickets is rare in developed countries. There is another type of rickets that is inherited in which Vitamin D is not absorbed.

What are symptoms?

In most cases, bowing of the lower extremities is seen while the child walks or stands. These children are mostly toddlers and have otherwise no significant problems with coordination and are not delayed in their milestones. In-toeing or turning of the feet is often seen with bowed legs.

Bowing of the legs does not typically cause pain in children, but if the bowing persists into adolescence, it may lead to discomfort in joints, such as the hips, knees, and ankles.

What can we expect when we visit the specialist?

When the child visits the healthcare provider concerning bowed legs, a thorough physical exam will be performed and past medical history will be taken.

If the child is healthy without any other medical problems, the bowing is equal on both sides, and the child is under two years of age, the child will most likely not need any radiographs.

If the child has severe bowing, one side is significantly more bowed than the other, or the child is greater than two and a half years of age, radiographs of the lower extremities will be ordered.

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What is the treatment?

If the child has physiologic genu varum, in the majority of cases, the bowing will correct by 3 to 4 years of age on its own without any treatment needed. Your specialist may want to follow-up with the child every six months to evaluate how the bowing is correcting on its own.

If the child has infantile Blount's Disease or Rickets that was not treated, the bowing may worsen over time during childhood. Many of these children will have pain due to abnormal stress placed on their joints. If the child is diagnosed with Rickets, he/she will be referred to a metabolic specialist for medical management and will continue to be followed by an Orthopedic Specialist.

Surgical treatment

Surgical treatment is extremely rare for physiologic genu varum. In the rare occasion that the bowing does not correct on its own, it may cause pain and cosmetic concerns. If severe enough, surgery can be performed to correct the remaining deformity.

If a child has infantile Blount's disease and bowing progresses, the child will need surgery to prevent further bowing and damage to the growth plates.

Children with Rickets may also require both surgical and medical intervention.