

# Patient Education



ARNOLD PALMER HOSPITAL  
For Children  
Supported by Arnold Palmer Medical Center Foundation

The Orthopaedic Center  
at Arnold Palmer Hospital  
83 W. Columbia St. Orlando, FL 32806  
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## Knock Knees (Genu Valgum)

Knock knees is a condition in which the knees touch, but the ankles do not touch. The legs angle inward.

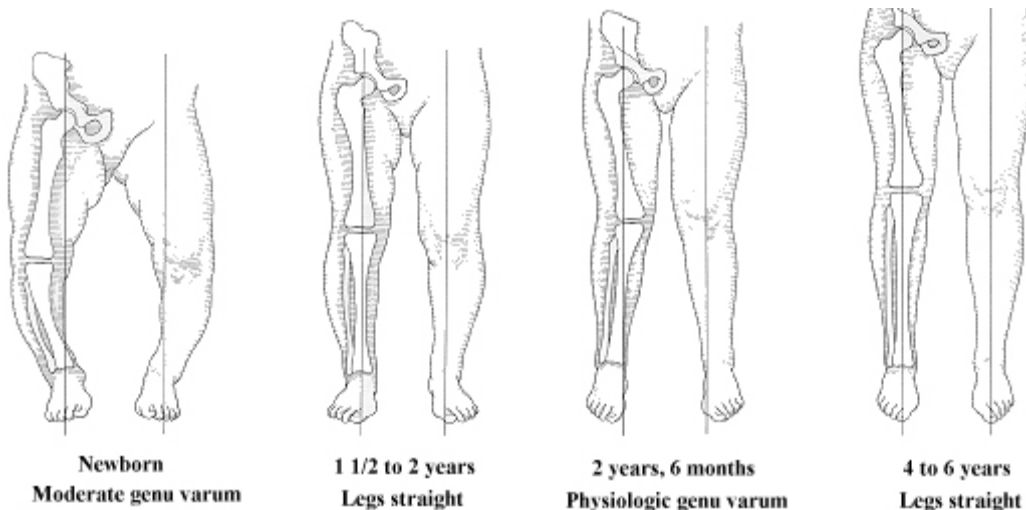
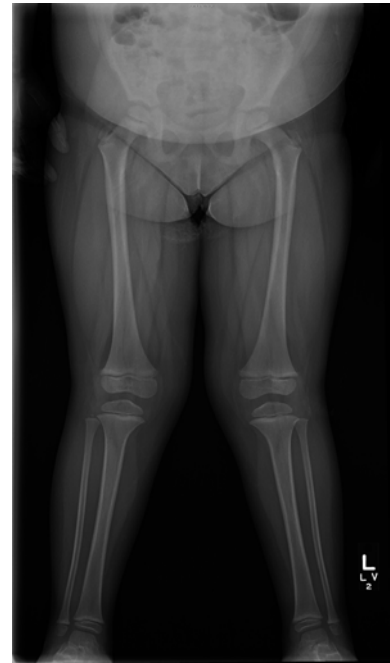
The technical term is genu valgum. Genu means knee. Valgum is the direction.

### Causes, incidence, and risk factors

In normal child development, most infants start out with bowlegs because of their folded position in the uterus. The infant's bowlegs begin to straighten once the child starts to walk (at about 12 to 18 months). By age 3, most children become knock-kneed. When the child stands, the knees touch but the ankles are apart.

Some children are, of course, more knock-kneed than others as there is natural variation between all children.

As natural development continues, most children's knock-knees will improve from age 3 to about age 8. By puberty, the legs straighten out and most children can stand with the knees and ankles touching (without forcing the position).



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In some rare instances, Knock knees can also develop as a result of a medical problem or disease, such as:

- Injury (usually a fracture) of the shinbone (tibia) (only one leg will be knock-kneed)
- Osteomyelitis (bone infection)
- Overweight or obesity
- Rickets (a disease caused by a lack of vitamin D) and is usually hereditary

## Signs and tests

Your orthopaedic surgeon will decide whether x-rays or other tests (such as a vitamin D level) are necessary, however, these are frequently unnecessary unless the deformity is worsening over time.

## Treatment

Knock knees are usually not treated.

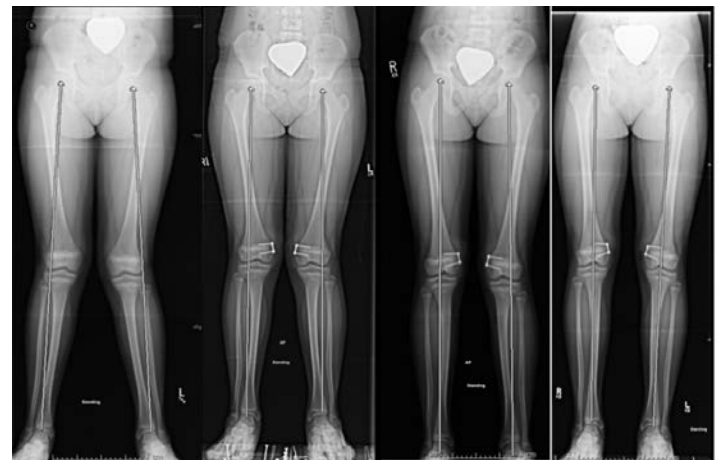
There are no braces or special shoes or cast that will improve this.

## Surgery

Surgery may be considered for knock knees that persist beyond late childhood (beyond age 8) and in which the separation between the ankles is severe. While the surgery is fairly minor, we would not choose to do it in a child except in special circumstances before the age of 8 or 9.

## Prevention

There is no known prevention for normal knock knees.



Age 10+7

Age 10+11

Age 11+2

Age 11+6

## References

1. Hosalkar HS, Gholve PA, Wells L. Torsional and angular deformities. In: Kliegman RM, Behrman RE, Jenson HB, Stanton BF, eds. *Nelson Textbook of Pediatrics*. 18th ed. Philadelphia, Pa: Saunders Elsevier;2007:chap 674.
2. Sass P, Hassan G. Lower extremity abnormalities in children. *Am Fam Physician*. 2003;68:461-468.

<http://www.doctorslounge.com/pediatrics/diseases/genuvar.htm>

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