



## **Genu varum**

bowlegs or legs in O

## **Genu valgum**

knock-knees or legs in X

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*The purpose of this sheet is to inform you about the pathology and to present the various treatment options, if available. Please note that this sheet is for informational purposes only; each case is different and a physician examination and instructions are obligatory*

## What does it mean?

**Genu varum** is the scientific term for bowlegs or legs in O, when we look at the child in a standing position and the feet touch, but the knees are apart.

**Genu valgum** is the scientific term for knock-knees or legs in X, when we look at the child in a standing position, the knees touch but the feet are apart.

## When is it normal?

Both of these conditions can be normal and physiological depending on your child's age.

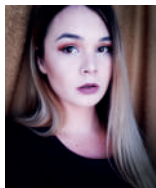
**Genu varum** - most children have a varus deformity when they are born, which is considered normal until the age of 2 years old. Thereafter, between the age of 2 and 3 years the axis of the child's legs shifts to a physiological straighter axis, then **genu valgum** appears (the knees start to touch and the feet are becoming apart), which will accentuate the most around the age of 4-6, and then decrease progressively. At the end of the growing period the legs are straight or in a small degree of genu valgum.

## In conclusion:

genu varum is normal from birth until 2-3 years

genu valgum is normal at 4 years until 7-8 years

In these cases, no X-rays and no treatment are recommended in a healthy child



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## When is it abnormal?

If genu varum persists after the age of 3 years. In this case the suspicion of rickets (either due to deficient or to resistance to vitamin D) or a growth plate disease should be raised. Another instance of pathological deformation is when the deformity is present only on one side (regardless of age). In this instance we suspect a local cause, fracture or infection sequelae and recommend radiographic analysis.

## What is the treatment?

When the deviation is normal according to the age no treatment is necessary.

If the cause of deformation is rickets a medical treatment can be proposed.

If the cause of the deformation is a local one, surgical treatment can be proposed.

In case of an accentuated genu valgum or genu varum at puberty a surgical treatment (guided growth methods) can be proposed.

## What is the prognosis?

Pathological **genu varum** untreated could lead to arthrosis later in the adult life.

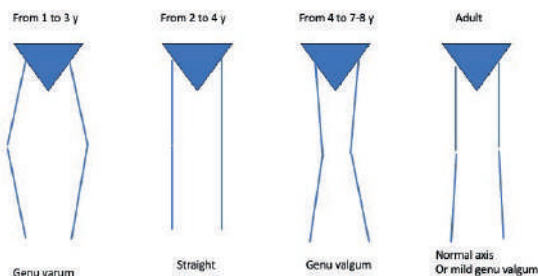
Pathological **genu valgum** untreated can give a functional discomfort (for example when running) or an esthetic discomfort.

## When you should take an appointment with an orthopaedic surgeon?

If **genu varum** persists after the age of 3 years old.

If the deformation is affecting only one leg.

In case of an accentuated **genu valgum** or **genu varum** at puberty.

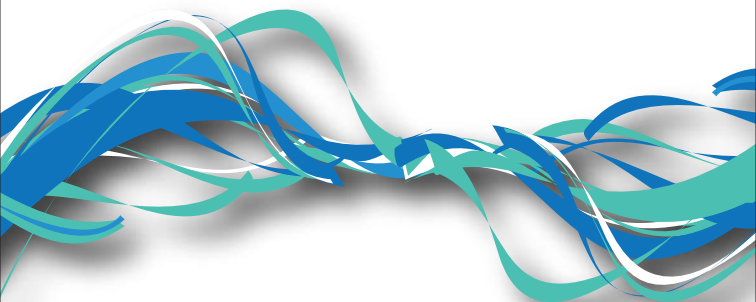


Only a pediatric orthopaedic surgeon can decide if radiographic examination is needed or not.





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