Physiologic Genu Varum – Bowed Legs

What is Physiologic Genu Varum?
Some children have curving or bowing of their legs; when sitting, standing or walking, their knees seem far apart. The medical term for this is genu varum. In the first 24 months of life, bowed legs are normal (physiologic). The legs naturally bow outward and begin to straighten as the baby/toddler grows. For most children, the bowing tends to improve by about 18 months, but in many children, it persists a little longer. By age 4, it is common to see the child become knock-kneed, and then by age 7-10 the legs have usually straightened. Occasionally, the bowing may be due to an abnormality of the growth plate at the top of the shin bone (tibia) at the knee, infection, or a specific condition affecting the bones. Your physician will explain the cause to you.

How is Physiologic Genu Varum Diagnosed?
Your physician will ask you about your child’s health, growth and development and examine his/her legs. If the bowing is very severe, is not equal in both legs, or if your child is very small for his/her age, your physician may want to take an x-ray of the legs. Physicians will also consider x-rays for patients who have bowing which is not getting better after age 2-3 years. The appearance of the x-ray will help determine if treatment is necessary.

What is the treatment for Bowed Legs?
For normal (physiologic) bowing, the treatment is generally observation. You may want to take a picture of your child standing with the legs uncovered (for example wearing a t-shirt and a diaper) in front of a blank wall. Several months later, you can take another picture to compare with the first to see if your child’s legs are strengthening. For other causes of bowing, your doctor will discuss treatment options with you including bracing and possible surgery.

Answers to Commonly Asked Questions:

1. Will special shoes, casting or bracing help my child’s physiologic bowing?
No, physiologic bowing will almost always straighten over time without the aid of any device or special shoes.

2. Will my child have completely straight legs as an adult?
Many adults have a small amount of bowing or knock-knees. This generally does not cause pain or limit participation in sports.

3. Will my child be able to play sports and have a normal life?
If your doctor determines that the bowing is physiologic (normal), the bowing should improve by the time he/she is about 2-3 years old. Even if your child ends up with a small amount of bowing as an older child or adult, he/she should not be limited by this.

4. What should I do if my child’s bowing continues to get worse or does not improve?
We recommend a return visit to the pediatric orthopaedic clinic if the bowing has not resolved or significantly improved by age 3.