

St. Croix Orthopaedics (SCO) is one of two orthopaedic practices in the United States approved to use the Fitbone® lengthening device. Fitbone® is a fully implantable, remote controlled lengthening system which is used to lengthen the tibia or femur in case-specific patients. SCO's Dr. Mark T. Dahl offers this treatment on a case-by-case basis at Woodwinds Health Campus in Woodbury, MN.

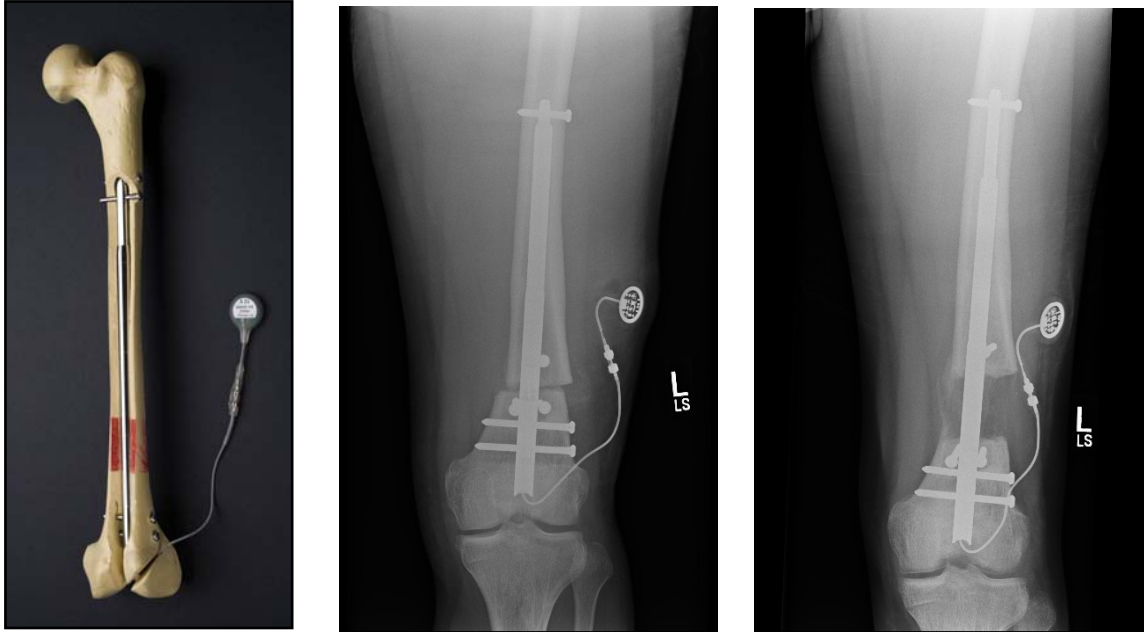
What is it?

Fitbone® is a telescopic rod, driven by a small electric motor, used to gradually increase the distance between two bone segments.

The rod is surgically implanted inside the bone and an electronic receiver is placed just under the skin. During surgery, the bone is separated into two segments to allow for lengthening. The two bone segments are then stabilized with the Fitbone® rod and fixation screws.

The initial lengthening process starts 3-5 days after surgery. Using an external stimulator, the patient sends radio-frequency waves through the skin to the internal receiver. This signals the rod's motor components to move with a sequence of nine "pulses". The rate, rhythm, and duration of the lengthening are controlled by the radio-frequency transmitter (external activator) and the implanted receiver.

The patient repeats this lengthening process three times a day resulting in one millimeter of length per day. This is continued until the desired bone length has been achieved.



Advantages of Fitbone® Versus External Fixation Lengthening Methods:

- Minimize risk of infection
- No pin/wire scarring
- Shortened hospital stay
- Better pain control
- User-friendly electronic device used in short time spans 3X daily

Disadvantages of Fitbone® Versus Traditional External Fixation Lengthening Methods:

- The use of this device requires special approval from the FDA on an individual basis.
- The device is expensive and only 2 surgeons in the United States have been approved to use this treatment.