



Orthopedic Care Center Hand and Orthopedic Upper Extremity Program Camptodactyly

Whether your child or loved one suffers a broken arm, a sports-related injury or the most complex spine condition, The **Orthopedic Care Center** at Children's Hospital Boston is committed to providing comprehensive and compassionate care. Established in 1903, we are among the world's most experienced pediatric orthopedic programs, treating a high volume of some of the most complex orthopedic conditions. And with 10 specialty clinics, we are the largest in the country. We are also one of the busiest. Each year, our staff attends to about 80,000 patient visits and conducts about 5,000 surgeries. In 2010, we were ranked #1 in pediatric orthopedics by *U.S. News & World Report*.

The **Hand and Orthopedic Upper Extremity Program** provides comprehensive care for infants, children and adolescents with a wide range of complex upper limb conditions. Multidisciplinary care involving occupational and physical therapy, splinting, casting and reconstructive surgeries is provided for congenital, neuromuscular, sports-related oncologic, traumatic or post-traumatic conditions.

What is camptodactyly?

The term "camptodactyly" is used to describe a flexion deformity of the finger. Typically, patients with camptodactyly present with a bent finger that cannot completely extend, or straighten.

What causes camptodactyly?

Camptodactyly can be caused by a number of different abnormal structures in the finger, including tight skin, contracted tendons and ligaments, abnormal muscles, and irregularly shaped bones.

How common is camptodactyly?

The exact incidence of this condition is unknown. However, it is estimated to affect approximately 1% of the general population to varying degrees. In general, patients will present either as infants or adolescents. The proximal interphalangeal joint of the small finger is most commonly affected, and camptodactyly occurs more frequent in girls than boys. While most cases are sporadic, some patients will have a family history of relatives with similar finger contractures. Camptodactyly also can also occur as part of an underlying syndrome with associated facial, dental, other systemic anomalies.

How is camptodactyly diagnosed?

Camptodactyly is diagnosed by treating physicians after a thorough medical history and careful physical examination. X-rays may be used to confirm the diagnosis.

How is camptodactyly treated?

Mild flexion deformities rarely cause pain or functional problems. For these reasons, surgery is not typically recommended for patients with mild (less than 30 degrees) flexion contractures. Splinting and occupational/hand therapy are the treatment of choice for patients with mild to moderate deformity.

For patients with severe flexion deformities - particularly very young patients or adolescents with rapidly progressing flexion contractures - surgery is often recommended. As there is no single cause for camptodactyly, no single operative procedure is recommended for all patients. While improvement can be achieved, patients will often have some residual flexion deformity, and there is a risk for recurrent contractures.



Side view of mild small finger camptodactyly.

Clinical Team

Peter M. Waters, MD
John E. Hall Professor of Orthopedic Surgery, Harvard Medical School
Clinical Chief, Orthopedic Surgery, Children's Hospital Boston

Donald S. Bae, MD
Assistant Professor of Orthopedic Surgery, Harvard Medical School

Apurva S. Shah, MD
Clinical Fellow in Orthopedic Surgery

Locations

Children's Hospital Boston
300 Longwood Avenue
Fegan 2
Boston, MA 02115

Children's Hospital Boston
at Waltham
9 Hope Avenue
Waltham, MA 02453

Children's Hospital Boston
at Lexington
482 Bedford Street
Lexington, MA 02420

Boston Children's North
10 Centennial Drive
Peabody, MA 01960