What to Expect from a Patellar Tendon Advancement With or Without a Distal Femoral Extension Osteotomy

WHY IS MY CHILD’S LEG ALIGNMENT IMPORTANT?
Children who walk in a crouched position often have a poorly aligned thigh bone (femur) and kneecap (patella). It is often difficult for children with this alignment to straighten their leg. This can cause difficulty for your child to move and may make wearing shoes or braces uncomfortable.

WHY SHOULD MY CHILD HAVE SURGERY?
• To improve their walking skills
• To improve their overall posture while standing or moving
• To reduce pain

ABOUT PATELLAR TENDON ADVANCEMENT SURGERY AND DISTAL FEMORAL EXTENSION (ROTATION) OSTEOTOMY
During the operation, the surgeon will shorten the tendon (patellar tendon) attached to the kneecap (patella) and then stabilize the knee cap. This surgery is called patellar tendon advancement. A patellar tendon advancement is often combined with another surgery to enable your child’s knee to straighten more. This additional surgery is called a distal femoral extension (rotation) osteotomy. The surgeon aligns the thigh bone to improve the range of motion of the knee. The new position of the thigh bone is secured with plates and screws. With better range of motion, your child’s crouched gait becomes more upright.

RECOVERING AT HOME
Before surgery, your care team will prepare you and your child for daily activities while not being able to put their weight onto their feet. This includes instructions for bathing, dressing and moving around safely after surgery while wearing a knee immobilizer (long leg brace). The surgeon will give instructions for limiting your child’s activity while they are healing. Please follow your surgery team’s recommendations for non-weight-bearing activities for your child until your surgeon approves all activities.

FOLLOW-UP APPOINTMENTS
Your orthopedic surgeon will work with you and your child to develop a treatment plan based on your child’s healing progress.

Please contact your care team if you have any questions or concerns after surgery.
Guidance for Your Therapist and Care Providers: Post-Op

Immediate Post-Op through end of Week 6

RESTRICTIONS
• Non-weight-bearing for 6-8 weeks
• Avoid impact activities

IMMOBILIZATION
• Recommend knee immobilizers

THERAPY FOCUS
• Protect the surgical site including the incision and underlying surgical tissues
• Home exercise instruction including positioning and ADL function
• Parent education for safe mobility

CRITERIA TO PROGRESS
• Uneventful healing of the surgical tissues

Week 6 to Completion of care

RESTRICTIONS
• Weight bearing as directed by member of surgical team at 6-week follow-up appointment

IMMOBILIZATION
• Recommend knee immobilizers

THERAPY FOCUS
• Surgical scar mobility to begin once good wound closure has occurred
• Begin AAROM and AROM of all LE joints when cleared for WB
• Begin weight-bearing activities and functional mobility
• Gradual return to prior level of function with focus on patient and family’s functional goals
• Anticipate full return to baseline function at about 12-18 months post-op