

Managing Hip Dysplasia

Orthopedic surgeon David Feldman, MD, explains the role of PT

on one side), legs of different lengths, hip "clicking" or "popping," toe-walking, a waddling duck-like gait, and subjective complaints of hip pain.

David Feldman, MD, is director of the Center for Children at New York University and Hospital for Joint Diseases Medical Centers. He is a well-known authority on pediatric orthopedic surgery, and one of the few orthopedic surgeons in the United States to specialize in Periacetabular Osteotomy, a unique surgical procedure to correct hip dysplasia in children and young adults.

ADVANCE recently spoke with Dr. Feldman to shed light on this disorder, and to identify the role that PTs play in lessening its effects.

ADVANCE: *How common is hip dysplasia in young people?*

Dr. Feldman: Hip pain of all kinds is not an uncommon presentation in both adults and children, but it often goes untreated. The hip joint develops at various stages throughout our lives, and hip dysplasia requires age-specific techniques to correct it. For doctors and therapists who have a patient with hip pain, one of the things you don't want to miss as a diagnosis is hip dysplasia.

ADVANCE: *What symptoms distinguish hip dysplasia from other disorders?*

Dr. Feldman: Probably the best telltale sign is the type of hip pain that comes about after a long day, and causes an individual to limp after a high degree of activity. It's not something that would be described as an acute pain, as might result from an avulsion or muscle pull, but a more generalized event with a chronic component. The pain may

temporarily get better through therapeutic stretching and modalities, but patients may complain that it's still nagging them and they just can't seem to progress to the next level or return to their normal activities.

ADVANCE: *How should a therapist approach a diagnosis of hip dysplasia?*

Dr. Feldman: The thing I'd like to stress is that this condition will always need some type of surgical correction. It will not resolve itself, and manual techniques won't work. If a physical therapist receives a prescription of "hip dysplasia: please treat," they should immediately inquire whether something else is being done to correct the patient's mechanics on a permanent basis, and if not, why they are being considered the primary line of treatment.

ADVANCE: *What surgical options are available?*

Dr. Feldman: I specialize in a procedure known as Periacetabular Osteotomy, which restores the hip socket anatomy using the patient's own bone and tissue. The advantage of this is the reduced incidence of infection and a lesser need for the follow-up surgeries often seen in more radical procedures, such as a total hip replacement. Patients receiving this procedure have ranged from 12 to 49 years of age, with the majority in their 20s. We cannot perform the procedure prior to skeletal maturity, but if hip dysplasia is caught in infancy, it's considered a slightly different disease, and other options such as manual reduction of the hip are possible.

ADVANCE: *How do you incorporate physical therapists into the mix?*

Dr. Feldman: Once the mechanics of the joint have been corrected, patients will ▽

Despite the careful screenings of pediatricians during exams of newborns and well-baby checkups, developmental dislocation of the hip (DDH) can often surface during a child's walking years or later.

DDH (also known as hip dysplasia) is an abnormal formation of the hip joint, in which the head of the femur is not set fully in the acetabulum. Ligaments surrounding the joint may also become loose and stretched. The degree of joint instability varies among cases, and can worsen with age and give rise to chronic pain and osteoarthritis by early adulthood.

According to the American Academy of Orthopedic Surgeons, DDH usually affects the left hip, has a genetic tendency, and is more common in girls, first-born children and babies born in the breech position. In fact, the American Academy of Pediatrics now recommends ultrasound screening of all female breech babies.

But hip dysplasia, a milder form of DDH, has been known to surface during the school years and even beyond age 20. Orthopedic surgeons urge therapists working with youngsters to keep a close watch for the telltale signs of a possible hip dysplasia: decreased agility and flexibility (especially

pediatric orthopedics

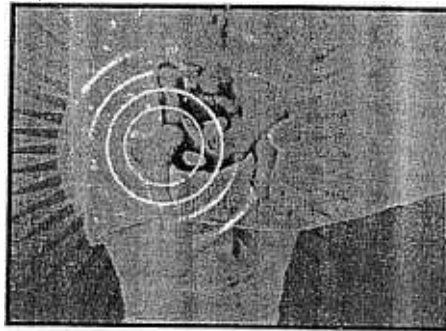
require skilled therapy. Postoperative rehab is generally broken down into two phases. The first involves basic gait training, and getting patients used to crutches and/or walkers. Then, after six to eight weeks, when the bone has healed and the muscles have reattached, PT becomes especially important. The modalities most often prescribed are the ones PTs are already familiar with: heat, ice, perhaps ultrasound in some cases. Then we'll try to mobilize the hip to regain range of motion and introduce some light strengthening. It's very important to divide the muscles and identify the ones that are weak; many times, it is the gluteus medius. Most of what the therapist does in this type of rehab is pretty straightforward; however, working on gait mechanics with someone who has been limping for years is not so easy.

ADVANCE: *What can indicate that rehab is not going as well as expected?*

Dr. Feldman: Persistent limping after the healing period needs to be investigated. Also, if persistent pain is not helped through massage, ultrasound, stretching or other interventions, we need to question why. We have to remember that in many cases the mechanics and gait patterns of the individual have changed, so some new overuse conditions may flare up. Tendinitis or bursitis that has not resolved after four to six months should be referred back to the physician for possible steroid injection.

ADVANCE: *Do you feel that PTs also have a role preoperatively?*

Dr. Feldman: I definitely believe that in most cases, it's beneficial for a patient to see a PT prior to the operation, to identify exercises that may make the procedure more tolerable. While I don't recommend weight training, I feel that repetitive motions like cycling will nourish the joint and make for a better surgical candidate. The stronger the musculature is beforehand, the better the rehab will be. It's also important for therapists to get the individual accustomed to using crutches or a walker, and to explain what they'll be facing in the weeks and months following the procedure.



ADVANCE: *What else would you like our readers to realize about this disorder?*

Dr. Feldman: I would say that it's important that PTs realize that this does exist, and that it must be corrected with an operation. We're seeing more and more that young people with hip dysplasia are being referred to PT without surgical intervention because

there are very few centers that perform hip dysplasia surgery in young adults. These centers will often tell people 'just wait for hip replacement surgery,' but for 20-year-olds whose lives will be affected in the interim, a delayed surgical procedure of that magnitude is not always the best option.

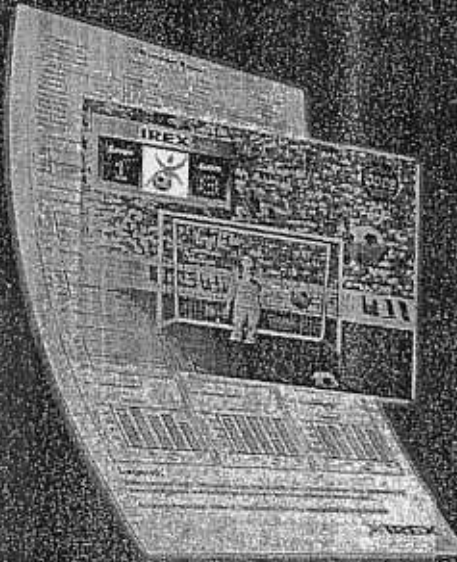
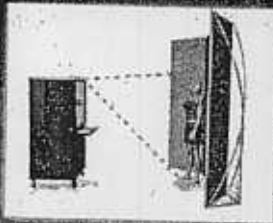
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