

# Wrist

## Gymnast Wrist

### Distal Radial Physeal Stress Syndrome or Distal Radial Epiphysitis

- An injury to the radial growth plate (thumb-side) of the wrist.
- Gymnasts will explain that they have radial or thumb sided wrist pain just below the crease of the wrist.
- The gymnast will have pain any time she/he puts weight or pressure on her/his wrist (ex: handstand, L hold, back handspring, etc.).

#### How Do You Get This?

Gymnast Wrist occurs when a gymnast repetitively impacts or pounds on her/his wrists and causes a stress fracture or injury/inflammation to occur in the radial growth plate.



#### There Are 3 Stages of Gymnast Wrist

- **Stage 1:** Radial (thumb-side) pain; clinical diagnosis with no changes on x-ray.
- **Stage 2a:** Only radial sided wrist pain, and only widening and/or sclerosis of the radial growth plate.
- **Stage 2b:** Mostly radial sided but some ulnar (pinky) side wrist pain, and the growth plate on the radial side has started to close. The ulnar bone has begun to lengthen in size (and may be even in height with the radius, also called ulnar neutral).
- **Stage 3:** Both radial and ulnar pain (typically more ulnar pain), and the radial growth plate has closed while the ulna has continued to grow (called ulnar positive variance).

## Physical Exam

On exam, you may have tenderness to palpation (touch) on your wrist at the growth plates, decreased wrist motion (specifically with wrist extension), and a positive L hold test (pain in the wrist with weight bearing).

## Diagnostic Images

An x-ray will be ordered of both wrists (specifically a PA x-ray film even if you do not have pain in the other wrist with the elbow flexed to 90 degrees and the arm abducted to 90 degrees), to compare the size and appearance of the growth plate and look for ulnar variance (the length of your ulna). Sometimes an MRI is ordered if there is concern for other injury or to quantify the degree of Gymnast Wrist.

## Treatment

To treat this injury, it will require limitation of gymnastics activity (specifically impact/pounding on the wrist), physical therapy, RICE (rest, ice, compression, elevation), may also include a cast or bracing, and can sometimes result in a surgical procedure.

## From Time of Diagnosis

There is typically a 4-6 week period of avoiding all impact and pounding on the wrist (a cast or brace may also be worn).

## Cast and Braces

- [Cast](#)
- [Wrist Brace/Splint](#)
- [Skids<sup>®</sup>](#), [Ten.0<sup>®</sup>](#), [DonJoy<sup>®</sup>](#)
- [Gibson<sup>®</sup>](#): [Ezy Wrap<sup>®</sup>](#)
- [Tiger Paws<sup>®</sup>](#)

## Injury Prevention

To prevent Gymnast Wrist, exercises should focus on strengthening your wrist, avoiding elbow hyperextension, strengthening your periscapular and rotator cuff muscles, and using proper technique when performing upper extremity weight-bearing gymnastics skills.