Upper Extremity diagnosis – Radial Head

Possible diagnoses

Anterior radial head or posterior radial head dysfunction

Related Anatomy:

Figure 1 - Anterior view of forearm  Figure 2 - Posterior view of forearm
**Brief description**: Monitor at the radial head and induce supination and pronation. Feel for the movement of the radial head. In supination the radial head will move anteriorly and during pronation the radial head will move posteriorly.

**Look (observation)**: Observe the elbow for any abnormal angle of the elbow (valgus and varus), masses, discoloration, swelling, rashes, and tophi.

**Feel (palpation)**:

**Physician position**: Seated or standing

**Patient position**: Seated

**Hand positioning**: Hand placement will vary as you examine the different parts of the elbow, however, to diagnosis the radial head you will grip the radial head with a pincer grip using your thumb and either index or middle finger.

Technique:

1. Place your index or middle finger on the anterior surface of the radial head.
2. Place your thumb on the posterior surface of the radial head.
3. Now move the forearm into supination, the radial head should move anteriorly.
4. Next, pronate the forearm. The radial head should now move posteriorly.
5. You may also have the patient actively pronate and supinate both arms while observing which is restricted.
6. Compare the left and right arms to each and determine which motion the radial head moves easily towards. This will be the name of the dysfunction. (Ex. The right radial head moves easily in supination, but is restricted in pronation. This is a right anterior radial head dysfunction.)

**Move (motion testing)**:

**Active motion testing**:

1. Have the patient flex and extend their elbows. Be sure to compare both sides.
2. Have the patient flex their elbows to 90 degrees and then tell the patient to pronate and supinate both forearms.

**Passive motion testing**:

1. Perform flexion, extension, pronation and supination by stabilizing the elbow and moving the forearm.

Other notes: To remember the direction of movement of the radial head with pronation and supination, use the mnemonic PPAS (posterior, pronation; anterior, supination).

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