Radial Head Fracture

Trying to save yourself from falling down by putting your hand out in front of you is almost instinctive, but the forces your arm sustains could end up traveling up the lower forearm and cause the elbow to fracture. It could also end up breaking the smaller bone inside of the forearm known as the radius. Breaks can occur at the radial head from this extreme force.

Radial head fractures are not particularly common injuries. They account for around 20 percent of all injuries to the elbow. Women frequently get this injury more than their male counterparts, especially between the ages of 30 and 40. Roughly, 10 percent of all elbow dislocations involve radial head fractures. When the humerus and the ulna go back to their normal alignment, pieces of the radial head might chip off.

If you have had a fall and have wrist, hand or elbow pain straight afterwards, you should go to your local hospital to get the arm assessed by a doctor who may consider using an X-ray to determine if there is a fracture.

Radial Head Fracture Anatomy

The arm is a complex system of muscles, bones, vessels and nerves. It extends from the shoulder down to the fingertips. This evolutionary tool has allowed humans to use tools and climb trees. Several pieces join together to make the arm one of the most useful of all tools in the human body. These main components are:

- **Upper Arm** Extending from the shoulder all the way down to the elbow, this part provides the arm with the lifting and pulling strength.
- **Elbow** Thanks to this hinged joint, the arm can swing in a 180 degree range at full extension.
- Forearm The forearm lies between the elbow and the wrist. The muscles within this area help to rotate the wrist.
- Wrist Located in the upper part of the hand, these 13 bones, as well as multiple tendons and muscles, form this intricate area.
- **Hand** Using five fingers, the hand helps you to do a significant amount of complicated tasks.

The radius is the smaller of the two forearm bones. It connects the thumb to the elbow. The radial head is a bulb on the end of the radius, located at the elbow. Fracture to the radial head will cause elbow pain, stiffness and swelling.

How to Treat a Radial Head Fracture:

If you have sustained a large trauma to the elbow, and now have severe pain and difficulty moving your arm, you should get to a hospital and undergo an X-ray. Surgery may or may not be required depending on the severity of the fracture, and the opinion of the consultant.

1. Type I Fractures

This type of fracture is often small and the pieces of bone might still be fitted together. Treatment often involves wearing a sling for a few days, followed up with early movement. If you attempt to move the arm too quickly, or you put too much stress through the arm, you could displace the bones. After 6-10 weeks the bones naturally heal together.

2. Type II Fractures

If there is only a minimal amount of displacement, you will probably wear a splint for a couple weeks and then proceed with movement exercises. Small fragments might have to be surgically removed. If the fragment is too big, you might need screws or pins to put it back together. If that cannot be done, the broken head pieces will be removed.

3. Type III Fractures

When multiple pieces of broken bone are present that cannot be fitted back into position to heal, surgery is often the only option for treatment. The bone fragments are usually wired back together.

Tips:

- If you are falling down, try to avoid placing your hand out in front of you to break the fall. Rolling on to your side as you fall might be an option but it really depends how fast you go down.
- Once you are cleared, you need to perform movement exercises to prevent stiffness from setting into the injured site.
- Physical therapy is often required before you are allowed to resume all of your normal activities.
- Difficulty turning your forearm could be a sign of this condition.
- If you have pain when straightening or bending your elbow following a fall, you might have a fractured radial head, go to hospital to get it checked by a doctor.
- If you are over 60, and the fall was minor, you could consider discussing with doctor or GP if you require a DEXA bone density scan. This is useful if you have been taking any kind of steroid medication.
- Applying ice to reduce swelling may help in the early stages. Discuss with your RMP therapist if this would benefit you, how long to use the ice for, and how many times per day.

