

## **Broken Shoulder (Fractured Neck of Humerus)**

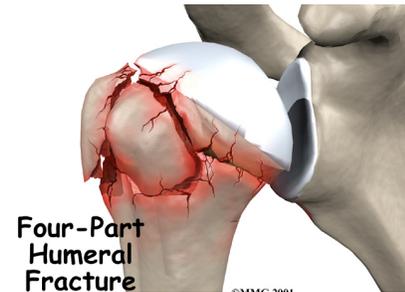
### *Patient Information Sheet*

#### Anatomy

The shoulder joint is a ball and socket joint. The “ball” is the head of the humerus. The humerus is the bone of the upper arm. When the head of humerus breaks, it can break into 2 or more pieces, and these pieces can either remain in position (non-displaced) or move out of position (displaced).

A fractured neck of humerus is a common injury of the upper limb. There are a wide range of potentially suitable treatments for a fractured neck of humerus, which depend on the type of fracture and the activity level of the patient.

Most fractures can be treated non-operatively, with a supportive sling for 3 to 6 weeks. During the time that the patient wears the sling, it is important that (s)he comes out of the sling to practice hand, wrist and elbow exercises to prevent stiffness from setting in. From 3 to 6 weeks the patient can usually commence some shoulder exercises, ranging from gentle pendular exercises to assisted forward elevation.



Some fractured shoulders may need an operation. This is usually the case if the some of the bone fragments, namely the tuberosities are widely displaced from the rest of the head of humerus.

The most common operation performed for a fractured neck of humerus is fixing the bones with plates, screws, and sutures. Other potential operations include humeral nails, half a shoulder replacement (hemiarthroplasty), or rarely a reverse shoulder replacement.

Regardless of the form of treatment, stiffness is a very common problem after a fractured neck of humerus. ***It is therefore very important that the exercises listed below are performed as described.*** In addition, a prolonged course of physiotherapy is usually required to assist in regaining a functional range of motion.

#### **Home Shoulder Range of Motion Program**

- All exercises to be done 4 times per day
- Perform each movement 10 times during each session.
- Hold each stretch for a count of 10 seconds
- Each time you perform your exercises try to increase the range of motion within the limits stated.
- Use pain as your guide. You should feel some discomfort with each stretch, however, it should not be severe pain.
- These exercises are important to prevent the development of a stiff / frozen shoulder.

***You will usually be required to attend for a repeat xray 1 to 2 weeks after the fracture to assess the position of the bone fragments. Please contact the orthopaedic team (numbers below) if this has not been organized.***

If you have had an operation, then count the weeks from the date of surgery. If you are not having an operation for your fractured shoulder, then count the weeks from the date of the fracture.

### Sling

**You should wear the sling for a minimum of 3 weeks, and a maximum of 6 weeks.** Between 3 to 6 weeks you may trial not wearing the sling- if you are comfortable then you may keep the sling off. If you are getting a lot of pain then you should keep wearing the sling.

### Weeks 0 to 6

#### **A. Hand & Wrist Exercises-** Begin these exercises now

Open and close your hand by making a fist then straightening out your fingers.

Bend your wrist back and forth as if knocking on a door (keep arm at side).

#### **B. Elbow Exercises-** Begin these exercises now

Bend and straighten your elbow. You may perform this exercise initially with the help of the other arm but you can use the muscles of the operated arm.

With your elbow at our side and bent at a right angle, turn palm up and palm down.

### Weeks 2 to 4

Continue hand, wrist and elbow exercises.

Commence Pendular exercises:

- Bend at the waist.
- Let the broken arm hang down with the force of gravity.
- Move the arm in gentle circles as though you were stirring a pot.

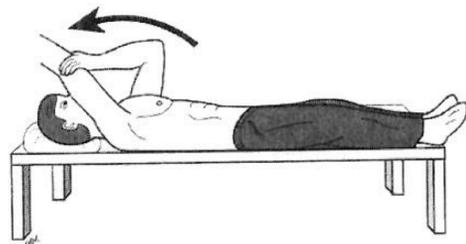


### Weeks 4 to 6

Continue hand, wrist and elbow exercises. Continue pendular exercises.

Commence assisted forward elevation exercises : While lying on your back, gently raise your arm up towards your head and over your shoulder. You should initially perform this exercise by using the good arm and helping to push the operated arm up. As you slowly feel more comfortable you can increase the range of motion over the shoulder and decrease the amount of help from your good arm.

Once you can comfortably lift your arm completely above your shoulder you can perform this exercise standing. To transition from a lying to a standing position, it is easiest to do this progressively by using a reclining chair and start the exercises lying down and then slowly and progressively raising the seat back up (usually over days or weeks), as you feel comfortable.



### ***How much pain will I have?***

Most patients will experience a variable amount of pain. This is dependent on what type of fracture you have. You will be given a prescription for pain medication to control your pain. You should take the pain medication regularly for the first 2 days and then only when required or before physiotherapy sessions. If you feel that you are having an extraordinary amount of pain despite taking pain medication, please contact my office (numbers listed below), or after hours the on-call orthopaedic registrar at Concord Hospital on 9767 5000.

### ***How much swelling and bruising will there be?***

Following a fractured neck of humerus, there will be a significant amount of swelling in the shoulder. This is due to the bleeding from the fracture itself. It is not uncommon for the swelling

and bruising to travel down the arm into the forearm and hand and also into the chest. It is extremely important to remove all jewellery, especially rings on fingers. To help with the swelling you should perform simple hand, wrist and elbow exercises as listed. If you feel you have an extraordinary amount of swelling or bruising following surgery, please contact the orthopaedic team.

***When can I take a bath or shower?***

If you had an operation, you should not soak the wounds in a bath or swimming pool for at least 2 weeks. You may shower or sponge bath after surgery, but you must not scrub the wounds and must try to keep them dry by covering them with a clean garbage bag or "Glad Wrap". You may take the sling off when in the shower and support it with the other hand. If the wounds get wet, just pat them dry with a clean towel and apply new dressings. It is important to keep the armpit clean and dry. When cleaning the armpit, don't move the arm with the muscles of the shoulder- you may damage the repair. Instead, lean forward by bending at the waist and allow the operated arm to gently dangle away from the body. You can then sponge and dry the armpit.

***How often do I need to wear the sling?***

You will wear the sling for 3 to 6 weeks depending on the surgery you had. You should wear the sling all the time, including sleeping, unless you are showering or doing your exercises.

***Can I use my arm to eat or write?***

You can gently use your operated arm to eat. It is easiest to slip your arm out of the sling and use your hand to feed yourself by bending at the elbow. Keep your elbow at your side and do not reach or do anything away from your body or lift anything heavy (no more than a coffee cup). Similarly you can write or type by keeping the elbow at your side.

***How can I get comfortable to sleep?***

Some patients have difficulty finding a comfortable position to sleep. When you sleep on your back it may help to place a small pillow behind the elbow or shoulder to help support the weight of the shoulder. If you sleep on your side (the fractured side up) then it may help to place a pillow between your arms. Do not sleep on your fractured side. You can also sleep in a reclining chair or propped up with pillows in bed. When you are getting in and out of a bed or chair, DO NOT use your broken arm to push down.

***If I had an operation, how much drainage and bleeding will there be and when can I change the dressing?***

A sticky dressing will be applied over your wound. This may become soaked with blood in the first 24 hours, at which stage it may be changed. Most wounds should be dry by 10 days after surgery. If your wounds are still draining thick blood or thick yellow fluid then you should contact me or my orthopaedic registrar on the numbers listed.

***When should I return to work?***

This depends on the type of work you do and how much pain you are in. In general, most patients do not work until they are seen back in the rooms or clinic at 10 to 14 days after surgery. After this, most patients are able to tolerate either single-handed work (i.e. answering the phone) or light deskwork duties only.

***Who should I contact if I think I have a problem?***

You should contact Dr Trantalís through his office during work hours or his on-call orthopaedic registrar at Concord Hospital after hours:

<i>After Hours</i>	Concord Hospital: 9767 5000
<i>Work Hours</i>	Miranda: 9525 2055, Sydney Olympic Park 1300 140 905, Randwick 9399 5333