

## Painful Shoulder with Motor Neurone Disease (MND)

**Pain is not a symptom of MND, but secondary pain can occur from altered or limited movement as muscles become weaker. Reasons for pain can include:**

- More strain on the ligaments and tendons around the joint.
- Poor posture, such as the arms always being down by the side and elbows never resting on a support.
- Never moving the shoulder through its normal, full range in usual daily activities, such as dressing, washing hair, reaching for objects in high cupboards. The joints can become stiff and painfully contracted.
- A fall onto the arm, where the muscles couldn't protect the arm.
- Poor manual handling technique, for example an arm being pulled or put in uncomfortable positions when you are being assisted with dressing or transfers.

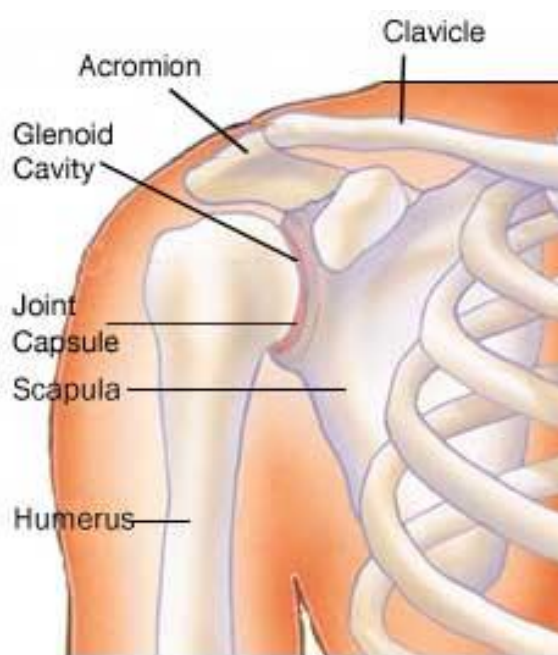
### Understanding the anatomy:

The shoulder is one of the largest and most complex joints in the body. The shoulder is not a single joint, but a complex arrangement of bones, ligaments, muscles, and tendons that is better called the shoulder girdle.

The bones that make up the shoulder girdle are the scapula (shoulder blade), clavicle (collarbone) and humerus (upper arm bone).

The shoulder is by far the most mobile joint of the body, allowing your arm to move in many directions. However, to achieve this mobility stability is sacrificed.

The shoulder ligaments are relatively weak and flexible. The joint relies on the many muscles of the shoulder girdle to maintain the shoulder joint alignment (humerus in glenoid cavity) during arm movement and even when your arm is by your side.



**Put simply, the shoulder relies on optimal muscle control. Progressive weakness with MND, if not well managed, can result in shoulder pain.**

As the muscles weaken, we need other methods to maintain good posture and positioning to reduce the strain on the joints and help to reduce pain.

**Physiotherapists can help** clients to prevent and manage painful shoulders by providing expert:

- **Exercise** techniques to optimise working muscles.
- **Stretches** or range of movement exercises to reduce stiffness and maintain range and flexibility of muscles and joints.
- **Advice** and **strategies** to support the weight of the arm, minimize and resolve hand swelling.
- **Problem solving postures** to adopt during rest and activity to avoid positions that cause pain and where the arm may be further damaged due to poor muscle control.

**If you would like to consult with our Motor Neurone Disease-specific Physiotherapist, please call 1800 777 175.**