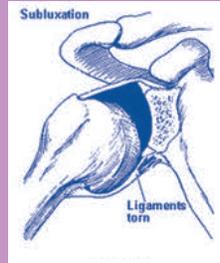


# 4

## SHOULDER COMPLEX CONSISTS OF 4 SEPARATE JOINTS

- Glenohumeral Joint
- Sternoclavicular Joint
- Acromioclavicular Joint
- Scapulothoracic Joint



## SUBLUXATION

Shoulder subluxation affects up to **81%** OF STROKE PATIENTS

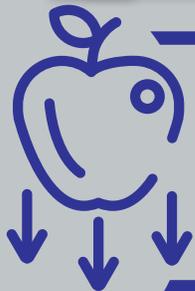
(Vuagnat J Rehabil Med 2003)



## TYPICALLY CAUSED

due to paralysis of muscles around the shoulder complex

Turner-Stokes et al. JRRD 2005



**GRAVITY** causes stretching of the capsule of the shoulder joint in a **DOWNWARD DIRECTION**

Turner-Stokes et al. JRRD 2005

# 3 WEEKS

Often occurs within the first 3 weeks post stroke in flaccid arms

Turner-Stokes et al. JRRD 2005



## SUBLUXATION

≠  
PAIN

Bohannon et al., Arch Phys Med Rehab, 1986

## ELECTRICAL STIMULATION

and *active strengthening* to the shoulder muscles can help *improve subluxation*. *Middle and Posterior Deltoids* are the key muscles to *strengthen*.

Lee et al., Clin Rehab, 2017

