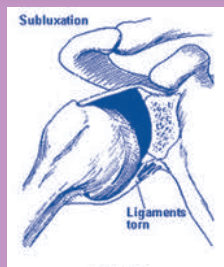


## 4 SHOULDER COMPLEX CONSISTS OF 4 SEPARATE JOINTS

*Glenohumeral Joint  
Sternoclavicular Joint  
Acromioclavicular Joint  
Scapulothoracic Joint*

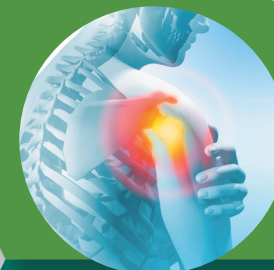


### SUBLUXATION

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

**81%**

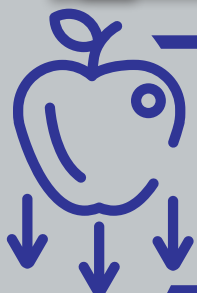
*(Vuagnat J Rehabil Med 2003)*



### 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*

