Scapula thoracic Instability

Scapula Thoracic Overview

The scapula is retained on the thorax by:

- Atmospheric pressure and weight of the arm
- Trapezius
- Serratus anterior
- Rhomboids

The concave-convex relationship of the scapula on the thorax is essential for the axioscapular force couple to properly stabilize. The subscapularis and serratus anterior need to remain active or possible consequent atrophy allows subsequent subscapular irritation and scapular instability.

Resting Position of Scapula (with arm dependent)

Lies over ribs two to seven
Superior angle – T2
Scapular spine root – T3
Inferior angle – T7 or T8
Vertebral border – 5 to 6 cm from midline
Plane of scapula is approximately right angle to plane of the glenoid
Lies obliquely between the frontal and sagittal planes, 30-45 degrees anterior to the coronal plane
A slight forward tilt is normal in the sagittal plane
The glenoid fossa has a downward inclination in normal resting shoulders (this is debatable)

Scapular Motion

Rotation – about a sagittal axis

Rotation – about a vertical axis
Occurs primarily at AC joint
Winging – or posterior movement of vertebral border of scapula

Rotation – about a coronal axis
Scapular tipping or tilting
Upward / downward rotation

Translatory motion
Upward/downward (elevated/depressed)
Abduction/adduction

Protraction
Forward movement of linear translation away from vertebral column, rotation of scapula around the end of the clavicle (winging) and anterior movement of the lateral end of the clavicle