SHOULDER GIRDLE Anatomy and function

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The shoulder girdle (clavicle, scapula and the humerus, which articulates directly with the scapula at the glenohumeral joint) is controlled and supported by muscles crossing between the spine, thorax, scapula and humerus. The sternoclavicular joint is the only synovial joint between the upper limb and the axial skeleton. The glenohumeral joint is most closely controlled by the deltoid and rotator cu ff muscles (subscapularis, supraspi natus, infraspinatus and teres minor), although 26 muscles in Otto Gerhard Karl Sprengel , 1852–1915, surgeon, Grossherzogliches Krankenhaus (the Grand Ducal Hospital), Brunswick, Germany , described congenital high scapula in 1891. Maurice Klippel , 1858–1942, neurologist, Hôpital Tenon, Paris, France. André Feil , 1884–1955, neurologist, Paris, France. Klippel and Feil described this condition in a joint paper in 1912. total act across this articulation, which controls the upper limb with respect to the torso. The scapula is integral to shoulder motion, both gliding and rotating on the posterolateral surface of the thorax. Of the 180° of elevation possible at the shoulder, around 50° is provided by scapular rotation on the chest while the clavicle elevates 30–60° concurrently . The remainder of the range of elevation occurs at the glenohumeral joint. During elevation both the humerus and clavicle rotate signifi - cantly: external rotation of the humerus bringing the greater tuberosity and cu ff attachments from beneath the acromion, - where they would otherwise limit the range (Figure 38.1).

o 90 o 130 o 50 o 50 o 30–60 Figure 38.1 Relative motion of the elements of the shoulder girdle. To be able to explain: The diagnosis and treatment of common upper limb • conditions

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