

STRUCTURAL ISSUES

- ❖ Rotator cuff tears
- ❖ Assess all rotator cuff muscle when addressing frozen shoulder

IMPAIRED FUNCTION

- ❖ Weakness in grip
- ❖ Pain when reaching behind back to the back seat of the car or to tuck in shirt, fasten bra, etc...
- ❖ Pain when sleeping on the ipsilateral side
- ❖ Pain when reaching behind back to tuck shirt, fasten bra or put on a coat
- ❖ Awakened by pain when sleeping on the opposite side with the arm draped forward
- ❖ Weakness in grip

CAUSES & PERPETUATING FACTORS

- ❖ Reaching behind to back seat of car or to a bedroom end table
- ❖ Twisting arm to hold balance on railing or pole
- ❖ Sleeping on side with upper arm draped forward
- ❖ Reaching overhead with repeated or sudden action as when painting crown molding
- ❖ Pulling something that is behind for extended periods like a child or a dog on a leash

DIFFERENTIAL ASSESSMENT

Middle and superior bellies

- ❖ Pain, deep in the shoulder that disturbs sleep when the arm is draped forward while laying on the opposing side or is aggravated by reaching behind the body strongly indicates this muscle.
- ❖ Pain deep in the shoulder must be distinguished from bone spurs, bicipital tendonitis as well as the referral of biceps brachii, coracobrachialis, deltoid, latissimus dorsi, pectoralis major (clavicular), pectoralis minor, scalenes, supraspinatus and triceps brachii.

Infraspinatus is one of the most commonly occurring pain patterns in the body and the most common pattern in the shoulder.

An anterior humeral head stresses the joint and activates the infraspinatus trigger point. This is cause in many ways but most commonly caused by sleeping on the painful shoulder. After the humeral

head is displaced, the infraspinatus is overstretched by being draped forward when sleeping on the opposite side. Other rotator cuff muscles are also activated by displacement of the humeral head.

Coracobrachialis is the closest pattern to infraspinatus and the most difficult to separate as the motion of reaching behind the back creates activates both referrals. When the pattern is just in the shoulder, range-of-motion and palpation is needed to separate these patterns. When the full pattern is present these two patterns can be differentiated by the pattern in the forearm. Coracobrachialis is distinctive when it refers into the shoulder, posterior forearm and hand but skips the wrist.

Supraspinatus, medial deltoid and posterior deltoid patterns are also similar but usually activated by different activities and produces pain on lifting the arm to shoulder level instead of reaching behind and far overhead.

Weakened grip can also be created by the extensors of the forearm, especially after frozen shoulder.

When the full pattern is present and radiates into the radial hand, it can be mistaken for the referral of scalenes. Infraspinatus is more focused on the shoulder and disturbs sleep where scalenes are usually focused on the hand and upper back with stiff and swollen hands in the morning.

The bicipital, pectoral and anterior deltoid patterns are usually expressed as more superficial and anterior than infraspinatus.

Latissimus dorsi also produces when reaching overhead but not when reaching behind the back or when reaching around the back of the head.

Triceps pain is usually more vague and superficial on the posterior arm and shoulder.

Medial border

- ❖ Pain at the medial border that is elicited by ischemic compression along the medial border is a strong indicator.

NEUROMUSCULAR ASSESSMENT

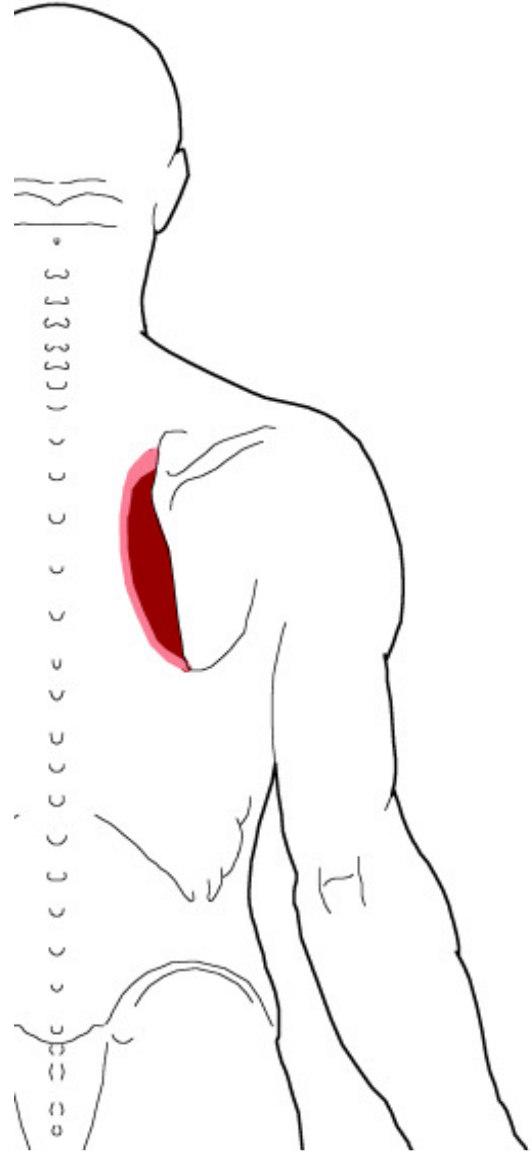
www.thebodyguild.org - Better body care through shared expertise

- ❖ Pain medial to the vertebral border to the scapula must be distinguished from the referral of iliocostalis lumborum serratus anterior, serratus posterior superior, scalenes trapezius (middle), and trapezius (lower).

Infraspinatus is one of the least common referral patterns medial to the vertebral border of the scapula.

AREAS OF PAIN AND REFERRAL

Medial border

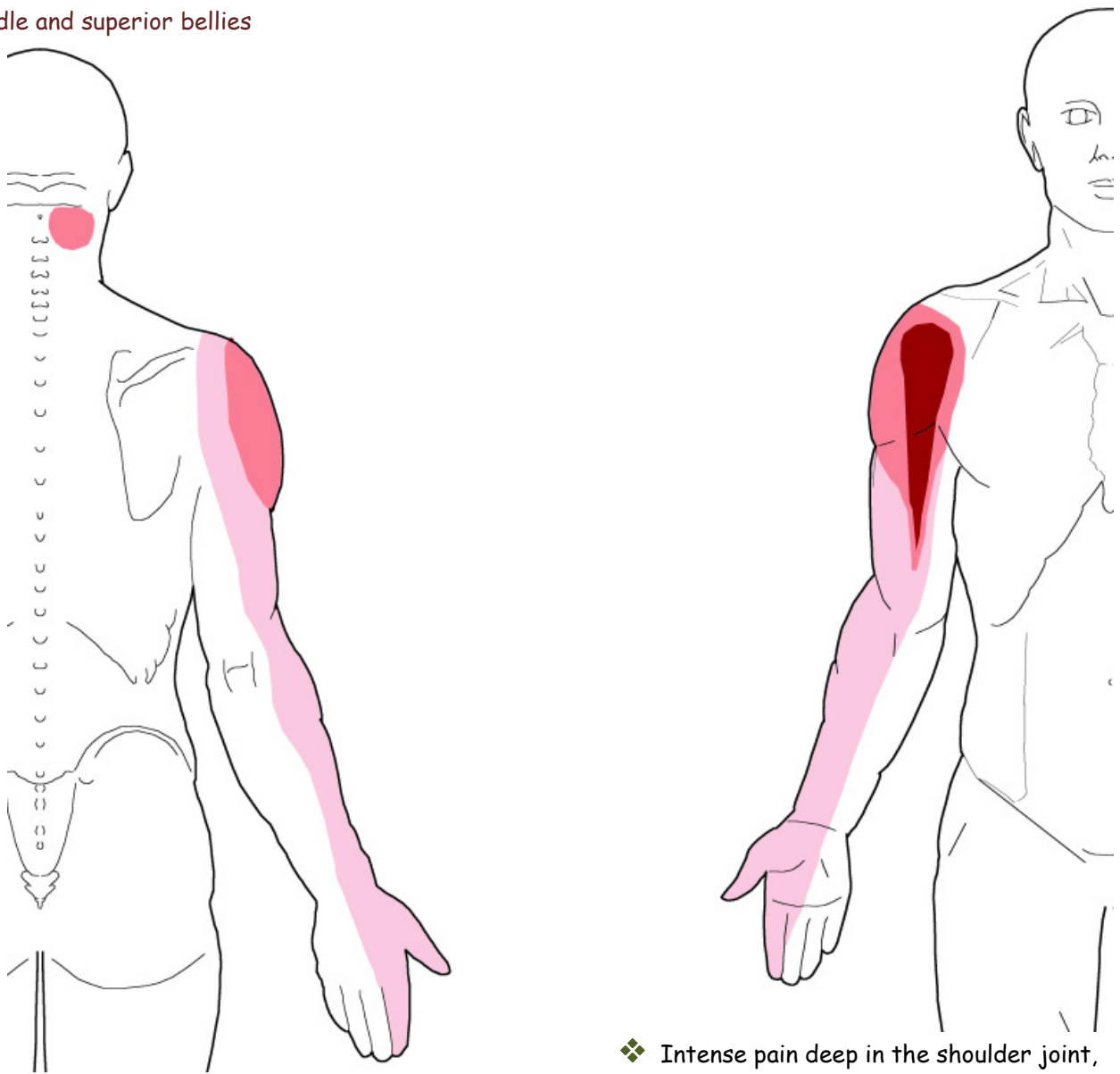


- ❖ Pain medial to the inferior angle of the scapula associated with tenderness at the medial border

NEUROMUSCULAR ASSESSMENT

www.thebodyguild.org - Better body care through shared expertise

Middle and superior bellies



- ❖ Intense pain deep in the shoulder joint, extending down the anterior brachium associated with tenderness in the middle and superior infraspinatus belly. Pain may extend into upper posterior cervicals or down the radial forearm and hand.

NEUROMUSCULAR ASSESSMENT

www.thebodyguild.org - Better body care through shared expertise