

Shoulder Palpation, ROM, MMT

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Handheld Dynamometry

Shoulder Abduction Without Strap
- Seated



Middle deltoid, Supraspinatus

Patient Position:

- Sitting

Therapist Position:

- Standing behind patient

Stabilization:

- Ipsilateral superior aspect of shoulder, avoiding pressure on deltoid

Palpation:

- Middle deltoid over superior lateral aspect of humerus

Cues:

1. Passively assess shoulder abduction range of motion
2. Encourage patient to abduct shoulder to end of range of motion
3. Bring shoulder down to 90 degrees of abduction
4. Place the dynamometer 2 fingers proximal to the lateral epicondyle of the humerus
5. Instruct the patient to push as fast and hard against the dynamometer as possible, and to keep pushing until instructed to relax (approximately 3-4 seconds)
 - a. To maintain standard cueing, countdown before each trial as follows: "3-2-1-go! Push, push, push, and relax"

Shoulder Abduction With Strap -
Seated



Middle deltoid, Supraspinatus

Patient Position:

- Sitting

Therapist Position:

- Standing behind patient on testing side

Stabilization:

- Distal humerus to hold dynamometer in place

Cues:

1. Passively assess shoulder abduction range of motion
2. Encourage patient to abduct shoulder to end of range of motion
3. Place shoulder down to 90 degrees of abduction
4. Anchor strap beneath table
5. Place the dynamometer 2 fingers proximal to the lateral epicondyle of the humerus
6. Instruct the patient to push as fast and hard against the dynamometer as possible, and to keep pushing until instructed to relax (approximately 3-4 seconds)
 - a. To maintain standard cueing, countdown before each trial as follows: "3-2-1-go! Push, push, push, and relax"

Scapular Adduction - Prone



Middle Trapezius

Patient Position:

- Prone with shoulder abducted to 90 degrees, elbow fully extended, and neutral forearm pronation (thumb towards ceiling)
- Head can also be turned to contralateral side

Therapist Position:

- Standing in ipsilateral axilla

Stabilization:

- Posterior shoulder, avoiding pressure on test muscles

Cues:

1. Passively assess scapular adduction range of motion
2. Encourage patient to adduct scapula to end of range of motion
3. Palpate middle trapezius
4. Place the dynamometer 2 fingers proximal to the radial styloid process
5. Instruct the patient to push as fast and hard against the dynamometer as possible, and to keep pushing until instructed to relax (approximately 3-4 seconds)
 - a. To maintain standard cueing, countdown before each trial as follows: "3-2-1-go! Push, push, push, and relax"

Scapular Depression - Prone



Lower Trapezius

Patient Position:

- Prone with shoulder abducted to 130 degrees, elbow fully extended, and neutral forearm pronation (thumb towards ceiling)
- Head can also be turned to contralateral side

Therapist Position:

- Standing in ipsilateral axilla

Stabilization:

- Posterior shoulder, avoiding pressure on test muscles

Cues:

1. Passively assess scapular adduction and depression range of motion
2. Encourage patient to adduct and depress scapula to end of range of motion
3. Place the dynamometer 2 fingers proximal to the radial styloid process
4. Instruct the patient to push as fast and hard against the dynamometer as possible, and to keep pushing until instructed to relax (approximately 3-4 seconds)
 - a. To maintain standard cueing, countdown before each trial as follows: "3-2-1-go! Push, push, push, and relax"

Shoulder Extension Without Strap - Prone



Latissimus Dorsi, Posterior Deltoid, Teres Major

Patient Position:

- Prone
- Testing limb in full extension and internal rotation

Therapist Position:

- Standing on ipsilateral side

Stabilization:

- Ipsilateral thorax
- Ipsilateral border of the scapula staying off of the spinous processes

Cues:

1. Passively assess shoulder extension range of motion
2. Encourage patient to extend and internally rotate the shoulder to end of range of motion
3. Place the dynamometer 2 fingers proximal to the lateral epicondyle of the humerus
4. Instruct the patient to push as fast and hard against the dynamometer as possible, and to keep pushing until instructed to relax (approximately 3-4 seconds)
 - a. To maintain standard cueing, countdown before each trial as follows: "3-2-1-go! Push, push, push, and relax"

Shoulder Extension With Strap - Prone



Latissimus Dorsi, Posterior Deltoid, Teres Major

Patient Position:

- Prone
- Testing limb in full extension and internal rotation

Therapist Position:

- Standing on ipsilateral side

Stabilization:

- Distal humerus to hold dynamometer in place
- Optionally at ipsilateral thorax

Cues:

1. Passively assess shoulder extension range of motion
2. Encourage patient to extend and internally rotate the shoulder to end of range of motion
3. Anchor strap to the table
4. Place the dynamometer 2 fingers proximal to the lateral epicondyle of the humerus
5. Instruct the patient to push as fast and hard against the dynamometer as possible, and to keep pushing until instructed to relax (approximately 3-4 seconds)
 - a. To maintain standard cueing, countdown before each trial as follows: "3-2-1-go! Push, push, push, and relax"

Shoulder External Rotation With Strap - Seated



Infraspinatus, Teres Minor

Patient Position:

- Seated

Therapist Position:

- Standing on ipsilateral side

Stabilization:

- Distal forearm to hold dynamometer in place
- Optionally at medial elbow joint

Cues:

1. Passively assess external rotation range of motion
2. Encourage patient to externally rotate shoulder to end range of motion
3. Return the shoulder to neutral rotation and 90 degrees of elbow flexion
4. Place the dynamometer 2 fingers proximal to the radial styloid process
5. Instruct the patient to push as fast and hard against the dynamometer as possible, and to keep pushing until instructed to relax (approximately 3-4 seconds)
 - a. To maintain standard cueing, countdown before each trial as follows: "3-2-1-go! Push, push, push, and relax"

Shoulder External Rotation Without Strap - Prone



Infraspinatus, Teres Minor

Patient Position:

- Prone with shoulder abducted to 90 degrees and elbow flexed to 90 degrees

Therapist Position:

- Standing on ipsilateral side

Stabilization:

- Posterior scapula, avoiding contact with test muscles

Cues:

1. Passively assess shoulder external rotation to end range of motion
2. Encourage patient to externally rotate shoulder to end range of motion
3. Place the dynamometer 2 fingers proximal to the radial styloid process
4. Instruct the patient to push as fast and hard against the dynamometer as possible, and to keep pushing until instructed to relax (approximately 3-4 seconds)
 - a. To maintain standard cueing, countdown before each trial as follows: "3-2-1-go! Push, push, push, and relax"

Shoulder External Rotation Without Strap - Seated



Infraspinatus, Teres Minor

Patient Position:

- Seated
- Shoulder abducted to 90 degrees and elbow flexed to 90 degrees

Therapist Position:

- Standing on ipsilateral side

Stabilization:

- Ipsilateral thorax or scapula if scapular stabilizers are weak, avoiding pressure on tested muscles

Cues:

1. Passively assess shoulder external rotation to end range of motion
2. Encourage patient to externally rotate shoulder to end range of motion
3. Place the dynamometer 2 fingers proximal to the radial styloid process
4. Instruct the patient to push as fast and hard against the dynamometer as possible, and to keep pushing until instructed to relax (approximately 3-4 seconds)
 - a. To maintain standard cueing, countdown before each trial as follows: "3-2-1-go! Push, push, push, and relax"

Shoulder External Rotation Without Strap - Supine



Infraspinatus, Teres Minor

Patient Position:

- Supine or hooklying with arm by side and elbow flexed to 90 degrees

Therapist Position:

- Standing on ipsilateral side

Stabilization:

- Medial elbow joint

Cues:

1. Passively assess external rotation range of motion
2. Encourage patient to externally rotate shoulder to end range of motion
3. Return the shoulder to neutral rotation and 90 degrees of elbow flexion
4. Place the dynamometer 2 fingers proximal to the radial styloid process
5. Instruct the patient to push as fast and hard against the dynamometer as possible, and to keep pushing until instructed to relax (approximately 3-4 seconds)
 - a. To maintain standard cueing, countdown before each trial as follows: "3-2-1-go! Push, push, push, and relax"

Shoulder Flexion With Strap - Seated



Anterior Deltoid,
Coracobrachialis

Patient Position:

- Seated

Therapist Position:

- Standing on ipsilateral side

Stabilization:

- Superior aspect of the ipsilateral shoulder

Cues:

1. Passively assess shoulder flexion range of motion
2. Encourage patient to flex shoulder to end of range of motion
3. Bring shoulder down to 90 degrees of flexion
4. Anchor strap beneath the table
5. Place the dynamometer 2 fingers proximal to the lateral epicondyle of the humerus
6. Instruct the patient to push as fast and hard against the dynamometer as possible, and to keep pushing until instructed to relax (approximately 3-4 seconds)
 - a. To maintain standard cueing, countdown before each trial as follows: "3-2-1-go! Push, push, push, and relax"

Shoulder Flexion With Strap - Seated



Anterior Deltoid,
Coracobrachialis

Patient Position:

- Seated

Therapist Position:

- Standing on ipsilateral side

Stabilization:

- Superior aspect of the ipsilateral shoulder

Cues:

1. Passively assess shoulder flexion range of motion
2. Encourage patient to flex shoulder to end of range of motion
3. Bring shoulder down to 90 degrees of flexion
4. Place the dynamometer 2 fingers proximal to the lateral epicondyle of the humerus
5. Instruct the patient to push as fast and hard against the dynamometer as possible, and to keep pushing until instructed to relax (approximately 3-4 seconds)
 - a. To maintain standard cueing, countdown before each trial as follows: "3-2-1-go! Push, push, push, and relax"

Shoulder Horizontal Abduction -
Prone



Posterior Deltoid

Patient Position:

- Prone with head turned to contralateral side

Therapist Position:

- Standing on ipsilateral side

Stabilization:

- Ipsilateral scapula

Cues:

1. Passively assess shoulder horizontal abduction to end range of motion
2. Encourage patient to horizontally abduct shoulder to end range of motion
3. Place the dynamometer 2 fingers proximal to the humeral epicondyles
4. Instruct the patient to push as fast and hard against the dynamometer as possible, and to keep pushing until instructed to relax (approximately 3-4 seconds)
 - a. To maintain standard cueing, countdown before each trial as follows: "3-2-1-go! Push, push, push, and relax"

Shoulder Horizontal Adduction -
Supine



Pectoralis Major, Anterior
Deltoid

Patient Position:

- Supine
- Shoulder flexed to 90 degrees and elbow flexed to 90 degrees

Therapist Position:

- Standing on ipsilateral side

Stabilization:

- Ipsilateral shoulder on the distal 1/3 of the clavicle

Cues:

1. Passively assess shoulder horizontal adduction to end range of motion
2. Encourage patient to horizontally adduct shoulder to end range of motion
3. Place the dynamometer 2 fingers proximal to the humeral epicondyles
4. Instruct the patient to push as fast and hard against the dynamometer as possible, and to keep pushing until instructed to relax (approximately 3-4 seconds)
 - a. To maintain standard cueing, countdown before each trial as follows: "3-2-1-go! Push, push, push, and relax"

Shoulder Internal Rotation With Strap - Seated



Subscapularis

Patient Position:

- Seated with arm by side and elbow flexed to 90 degrees

Therapist Position:

- Standing on ipsilateral side
- Strap anchored around clinician's hips

Stabilization:

- Ipsilateral thorax or scapula if scapular stabilizers are weak, avoiding pressure on tested muscles

Cues:

1. Passively assess shoulder internal rotation to end range of motion
2. Encourage patient to internally rotate shoulder to end range of motion
3. Return the shoulder to neutral rotation
4. Place the dynamometer 2 fingers proximal to the radial styloid process
5. Instruct the patient to push as fast and hard against the dynamometer as possible, and to keep pushing until instructed to relax (approximately 3-4 seconds)
 - a. To maintain standard cueing, countdown before each trial as follows: "3-2-1-go! Push, push, push, and relax"

Shoulder Internal Rotation Without Strap - Seated



Subscapularis

Patient Position:

- Seated with shoulder abducted to 90 degrees and elbow flexed to 90 degrees

Therapist Position:

- Standing on ipsilateral side

Stabilization:

- Ipsilateral thorax or scapula if scapular stabilizers are weak, avoiding pressure on tested muscles

Cues:

1. Passively assess shoulder internal rotation to end range of motion
2. Place the shoulder in end range external rotation and 90 degrees of elbow flexion and shoulder abduction
3. Place the dynamometer 2 fingers proximal to the radial styloid process on the palmar aspect of the forearm
4. Instruct the patient to push as fast and hard against the dynamometer as possible, and to keep pushing until instructed to relax (approximately 3-4 seconds)
 - a. To maintain standard cueing, countdown before each trial as follows: "3-2-1-go! Push, push, push, and relax"

Shoulder Internal Rotation Without Strap - Prone



Subscapularis

Patient Position:

- Prone with humerus supported on table
- Shoulder abducted to 90 degrees and elbow flexed to 90 degrees

Therapist Position:

- Standing on ipsilateral side

Stabilization:

- Ipsilateral thorax or scapula if scapular stabilizers are weak, avoiding pressure on tested muscles

Cues:

1. Passively assess shoulder internal rotation to end range of motion
2. Encourage patient to internally rotate shoulder to end range of motion
3. Place the dynamometer 2 fingers proximal to the radial styloid process
4. Instruct the patient to push as fast and hard against the dynamometer as possible, and to keep pushing until instructed to relax (approximately 3-4 seconds)
 - a. To maintain standard cueing, countdown before each trial as follows: "3-2-1-go! Push, push, push, and relax"

Shoulder Internal Rotation Without Strap - Supine



Subscapularis

Patient Position:

- Supine or hooklying with arm by side and elbow flexed to 90 degrees

Therapist Position:

- Standing on ipsilateral side

Stabilization:

- Lateral elbow

Cues:

1. Passively assess shoulder internal rotation to end range of motion
2. Encourage patient to internally rotate shoulder to end range of motion
3. Place the dynamometer 2 fingers proximal to the radial styloid process
4. Instruct the patient to push as fast and hard against the dynamometer as possible, and to keep pushing until instructed to relax (approximately 3-4 seconds)
 - a. To maintain standard cueing, countdown before each trial as follows: "3-2-1-go! Push, push, push, and relax"