BRIGHAM AND WOMEN'S HOSPITAL
A Teaching Affiliate of Harvard Medical School
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Department of Rehabilitation Services
Occupational Therapy

Standard of Care: Radial Tunnel Syndrome

Case Type / Diagnosis / Anatomy:

Radial tunnel syndrome (RTS) was first reported as a unique clinical syndrome in 1956. RTS has also been called radial pronator syndrome. It is a pain syndrome that is distinct from lateral epicondalgia and is a syndrome arising from compression of the posterior interosseous nerve (PIN), which results in refractory lateral elbow and forearm symptoms. [15] This compression occurs in the proximal forearm where the radial nerve splits into the PIN (main trunk) and the sensory branch of the radial nerve (minor trunk). Compression can occur either before or after this split. Radial nerve anatomy around the elbow is highly variable. The radial tunnel originates near the level of the radiocapitellar joint where the nerve lies against the joint capsule. The tunnel's medial border is the brachialis muscle proximally and the biceps tendon distally. The roof and lateral border of the tunnel is comprised of the extensor carpi radialis longus (ECRL) and the extensor carpi radialis brevis (ECRB). The tunnel continues to the distal border of the supinator. There are five sites of potential compression of the PIN:

1. Proximal origin of the ECRB or fibrous bands within the ECRB
2. Thickened fascial tissue superficial to the radiocapiteller joint
3. Leash of Henry (Radial recurrent vessels)
4. Arcade of Froshe (Proximal border of the supinator muscle)
5. Distal boarder of the supinator muscle [10, 12]

The radial nerve, the largest branch of the brachial plexus, is the continuation of the posterior cord of the brachial plexus. Its fibers are derived from the fifth, sixth, seventh, and eighth cervical and first thoracic nerves. It descends behind the first part of the axillary artery and the upper part of the brachial artery, and in front of the tendons of the latissimus dorsi and teres major. It then winds around from the medial to the lateral side of the humerus in a groove with the profunda brachii, between the medial and lateral heads of the triceps. It pierces the lateral intermuscular septum, and passes between the brachialis and brachioradialis (BR) to the front of the lateral epincondyle, where it divides into a superficial and a deep branch.

The muscular branches supply the triceps, anconeus, BR, ECRL, brachialis.

The cutaneous branches are two in number, the posterior brachial cutaneous and the dorsal antibrachial cutaneous.

- The posterior brachial cutaneous nerve arises in the axilla, with the medial muscular branch. It is of small size, and passes through the axilla to the medial side of the area supplying the skin on its dorsal surface nearly as far as the olecranon.

- The dorsal antebrachial cutaneous nerve perforates the lateral head of the triceps at its attachment to the humerus. The upper and smaller branch of the nerve passes to the front of the elbow, lying close to the cephaliec vein, and supplies the skin of the lower half of the arm. The lower branch pierces the deep fascia below the insertion of the deltoid, and descends along the lateral side of the arm and elbow, and then along the back of the forearm to the wrist, supplying the skin in its course, and joining, near its termination, with the dorsal branch of the lateral antebrachial cutaneous nerve.

The superficial branch passes along the front of the radial side of the forearm to the commencement of its lower third. It lies at first slightly lateral to the radial artery, concealed beneath the BR. In the middle third of the forearm, it lies behind the same muscle, close to the lateral side of the artery. About 7 cm. above the wrist, it passes beneath the tendon of the BR, and pierces the deep fascia and divides into two branches.

- The lateral branch, the smaller, supplies the skin of the radial side and ball of the thumb, joining with the volar branch of the lateral antebrachial cutaneous nerve.

- The medial branch communicates, above the wrist, with the dorsal branch of the lateral antebrachial cutaneous, and, on the back of the hand, with the dorsal branch of the ulnar nerve. It then divides into four digital nerves, which are distributed as follows: the first supplies the ulnar side of the thumb; the second, the radial side of the index finger; the third, the adjoining sides of the index and middle fingers; the fourth communicates with a filament from the dorsal branch of the ulnar nerve, and supplies the adjacent sides of the middle and ring fingers.

The deep branch winds to the back of the forearm around the lateral side of the radius between the two planes of fibers of the supinator, and is positioned downward between the superficial and deep layers of muscles, to the middle of the forearm. Considerably diminished in size, it descends, as the dorsal interosseous nerve, on the interosseous membrane, in front of the extensor pollicis longus, to the back of the carpus, where it presents a gangliform enlargement from which filaments are distributed to the ligaments and articulations of the carpus. It supplies all the muscles on the radial side and dorsal surface of the forearm, except the anconeus, BR, and ECRL.

ICD.9: 354.3

Causes of Radial Tunnel Syndrome:

There are numerous causes of RTS including space-occupying lesions such as tumors, local edema, inflammation, overuse of the hand and wrist through repetitive movements, blunt trauma to the proximal forearm with resultant bleeding.

Symptom Presentation:

The clinical presentation includes pain 4-5 cm distal to the lateral epicondyle in the region of the mobile wad, the ECRL, ECRB, and brachioradialis (BR), and over the course of the radial nerve down the forearm. [2] The pain in the dorsal forearm is generally characterized as a deep burning or ache. The pain increases after tasks that include wrist extension and forearm pronation. Night pain and pain at rest are also clinical features. [7]

Typically patients have pain and difficulty with resisted extension of the long finger with the elbow in extension, forearm in pronation and the wrist in neutral. In addition, resisted supination of the forearm with the elbow in extension is painful. A specific point of tenderness is typically found within the extensor musculature 4 to 5 cm distal to the lateral epicondyle.

The patient may also present with decreased range of motion with wrist extension and forearm pronation secondary to pain. Pain may also decrease patients' upper extremity strength. The decreased range of motion, decreased strength, and pain can result in loss of functional independence with ADL tasks. ADL deficits as described by each patient will reflect the tasks that are important to the individual.

Some occupational risk factors have been associated with RTS. Roquelaure et al found that those factory workers that use regular force of at least 1 kg more than 10 times per hour are at risk for RTS. Those whose static work includes a position of constant elbow extension ROM between 0 and 45 degrees are also at risk. Finally, those whose jobs require completed elbow extension associated with pronation and supination of the forearm are at risk for RTS. They did find no personal factors and no extraprofessional activities associated with an increased risk of RTS. [13, 14]

Indications for Treatment:

Patients who are referred to therapy generally report symptoms of RTS as described above. The clinician must listen and observe all of the patient's descriptions of paresthesias and/or motor loss to the hand, as they will assist in a guide to evaluation, conservative treatment, and prognosis.

Below are common symptoms, which generally have good prognosis with a course of conservative treatment of RTS.

- Cutting, burning, piercing, or stabbing pain affecting the top of the forearm and back of the hand.
- Pain is typically worse when the one tries to extend the wrist and fingers.
- There may be decreased sensation or parasthesias in the distal radial sensory nerve distribution of the dorsal first web space of the hand including the back of the thumb and index finger.
- Symptoms of weakness in the hand are generally present.

- Strength deficits of the extensor musculature of the forearm are common.
- A positive Tinel's sign over the radial nerve is rarely seen.
- Symptoms typically occur after significant repetitive use of the upper extremity.
- Mild loss of upper extremity function due to pain.

Contraindications / Precautions for Treatment:

Patients who are referred to therapy with the below symptoms typically have a poor prognosis for conservative treatment, as increasingly severe deficits noted during clinical observations are proportional to the degree of nerve damage and the duration of compression.

- Pronounced muscle atrophy of musculature innervated by the radial nerve
- Severe pain (> 8/10 on the patient pain analog scale)
- Patients who cannot tolerate NSAIDs may progress more slowly due to the inability to sufficiently manage inflammatory conditions.
- It is also important to consider a patient's ability to provide an accurate history of symptoms, and the ability to carry over education, written programs and directions to the home and occupational environments.
- The referring physician should be contacted if the patient's neurological symptoms continue to worsen or not respond to conservative treatment despite compliance with the treatment plan.

Examination:

Medical History:

The clinician should carefully review a patient's medical history questionnaire (on an ambulatory evaluation), patient's medical record, and medical history reported in the hospital's computerized medical record. Careful consideration should be made to identify any traumatic history to the affected extremity, rheumatoid illnesses, diabetes or other metabolic disorders. Finally, the clinician should review any diagnostic testing and imaging. Especially helpful would be reports from electromyographic testing if available. This test may note the presence and severity of nerve compression.

History of Present Illness:

The importance of obtaining a clear understanding of the patient's symptom history should not be underestimated. A careful and detailed history is very revealing and can be more useful than the objective clinical examination (which can be normal in the early stages of RTS). Specifically, it is important to determine if there are occupational activities that the patient is performing that require significant grip force and/or prolonged static or repetitive positioning in elbow extension in conjunction with supination or pronation. The clinician should obtain

information on the timeline of onset and development of the symptoms. The clinician should identify the behavior of the symptoms including provocative vs. relieving activities.

Medications:

The patient may be on NSAIDS (nonsteroidal anti-inflammatory drugs), as they are the medication of choice for decreasing inflammation, and soft tissue swelling leading to nerve compression. Corticosteroids can be injected into the radial tunnel region by an MD, and are provided to relieve pressure on the radial nerve. This will usually provide immediate, temporary relief to persons with mild and/or intermittent symptoms.

Diagnostic Tests:

- Radiographs of the forearm to rule out bony abnormality
- Electromyography (EMG) / nerve conduction tests may be performed and helpful if positive. However, with RTS these tests are typically negative. Nerve conduction velocity test is rarely positive. If EMG tests are positive they typically highlight changes in the muscle innervations of the musculature supplied by the PIN. [2]

Social History:

Review of a patient's home, work, recreational activities. Information should be obtained on patient's prior functional and present functional levels with these tasks. A clinician should identify repetitive and/or resisted motions involving the wrist and elbow. It is also of importance to identify poor body mechanics and posture present during daily activities.

Examination (Physical / Cognitive / applicable tests and measures / other)
This section is intended to capture the minimum data set and identify specific circumstance(s) that might require additional tests and measures.

Physical Examination

Pain: As measured on the VAS (Visual Analog Scale). Specify location of pain, activities that increase pain and/or decreased pain.

1. **P**ain – Place
2. **A**mount – Pain level VAS (0-10)
3. **I**ntensifiers
4. **N**ullifiers
5. **E**ffect on Function
6. **D**escriptors (i.e. sharp, dull, constant, throbbing, etc.)

Sensation: A patient with RTS may demonstrate decreased sensation or parasthesias in the radial nerve distribution of the dorsal first web space of the hand including the back of the thumb

and index finger. The severity of diminished sensations not a definite indicator of RTS, and can only contribute to the overall clinical presentation. A Semmes-Weinstein monofilament test is an accurate and objectively measurable test for sensory deficits in the hand. The Semmes-Weinstein can be a predictor of the quality of neural return, or the severity of diminution. [7] Please refer to the Sensation SOC for a description, and instructions for the administration of the test.

Edema: To note for objective differences in widths, measurements should be taken to distal B UE. Widths to be measured on documented landmarks, usually the distal wrist at the distal palmer crease, and recorded as circumferential measurements, in centimeters. In the absence of gross deformities, increases in width may show increased edema to carpal location and increase probability of median nerve compression.

Active and Passive Range of Motion: (A/PROM): Measure distal bilateral (B) upper extremity (UE) range of motion, (Elbow, forearm, wrist, thumb, digits) noting limitations to range due to pain, and or onset of parathesias. Of note, for most mild to moderate RTS patients, A/PROM is expected to be within normal ranges.

MMT/Strength testing: Specific MMT of all forearm/wrist/hand musculature is indicated. Special attention should be placed on those muscles innervated by the radial nerve.

Strength testing for general grip and pinch strengths can be done by the use of a calibrated dynamometer and a calibrated pinch gauge. Both tests are completed by having the patient squeeze and/or pinch as hard as possible, alternating between hands, and taking the average from three trials. The pinch gauge can measure 3 point as well as lateral pinches.

Neurodynamic testing: When evaluating a patient with suspected radial nerve entrapment it is important to conduct upper limb nerve tension (ULNT) tests to assist in assessing the status of the radial nerve and potential entrapments sites. The patient's symptoms should be noted before, during (after each sequential movement), and after each ULNT tests. The most common sensory response is a strong painful stretch over the radial aspect of the proximal forearm, often in conjunction with a stretch pain in the lateral aspect of the upper arm, or biceps region, or the dorsal aspect of the hand. Care should be taken with neurodynamic testing, particularly if the patient is acute and/or has a significant amount of pain as it can be quite provocative.

- **ULNT 2 (radial) – Active Test:** The patient is asked to hold their upper extremity at their side, flex their wrist, look at the palm and then internally rotate their arm so that they can look at their palm over their shoulder. Then the patient is instructed to depress their shoulder girdle and look away to laterally flex their neck. This position may be held for up to a minute.

- **ULNT 2 (radial) – Passive Test:** The patient is supine with the elbow of the upper extremity to be tested bent to 90 degrees. The examiner uses their thigh to carefully depress the patient's shoulder girdle. The patient's elbow is then extended and the entire upper extremity is internally rotated, followed by wrist flexion. Typically, one does not

need to flex the fingers; however, the radial sensory branch will be further loaded (tested) by flexion of the thumb and ulnar deviation of the wrist.

Functional Assessment: The use of a specific functional capacity questionnaire is recommended to establish current functional deficits, assist in establishing goals, and to track progress.

Possible tools:

- Michigan Hand Questionnaire
- Manual Ability Measure

Special Tests: The best-known provocative tests used in a RTS diagnosis are:

- Radial tunnel compression test, which involves the examiner rolling their fingers over the radial nerve region (perpendicular to the nerve) in the proximal forearm trying to elicit local pain and tenderness. Occasionally, distal radiation of symptoms occurs along the sensory branch of the radial nerve with this test.

- Resisted isometrics may be painful and weak of the ECRL, ECRB, and BR.

- Painful resisted middle finger extension test indicates compression at ECRB and BR

- Painful resisted supination test indicates compression at the Arcade of Froshe

- Maximal point of tenderness in radial tunnel verses on the ECRB is used to assist in differential diagnosis from lateral epicondalgia. [7]

- A positive finding on each of the following tests has been reported to assist in the diagnosis of RTS:

    - Significant tenderness in the radial tunnel.
    - Worsening of pain on the provocative middle finder extension and resisted supination tests.
    - Relief of symptoms following a radial tunnel anesthetic block. [2]

Acute (Inpatient (if applicable):

As Above

Sub-Acute (Outpatient) (if applicable):

As Above

Differential Diagnosis (if applicable): [7]

While RTS is certainly one cause of lateral elbow pain other common pathologies can cause pain in the lateral elbow as well.

- Ganglion cyst of the proximal radioulnar joint [11]

- Intraarticular elbow pathology: Typically patients have a history of trauma or chronic overuse syndrome. May need magnetic resonance image or pain radiography to diagnose. Mechanical joint abnormalities are usually present.

- Radiocapitellar articular pathology: Typically patients have a history of trauma or chronic overuse syndrome. May need magnetic resonance imaging or pain radiography to diagnosis. Mechanical joint abnormalities are usually present.

- Posterior interosseous nerve syndrome (primarily a motor deficiency): This is differentiated from RTS from the presence of motor abnormalities (complete loss of function to partial weakness)

- Lateral antebrachial neuritis
- Brachial plexopathy
- Chronic extensor compartment syndrome
- Chronic anconeous compartment syndrome

- Lateral epicondalgia: Both RTS and lateral epicondalgia have been reported to coexist in 5 % of patients. Symptoms of both conditions overlap greatly. The location of tenderness is typically different in the two conditions. Those with lateral epicondalgia typically have tenderness just distal to the lateral epicondyle over the ECRB of the common extensor tendon origin. Where those with RTS typically have tenderness 4 to 5 cm distal to the epicondyle within the extensor musculature. This is typically between the BR and the ECRB or between the mobile wad and the brachialis muscle. Typically the provocative tests, as outlined above, for RTS are not positive with lateral epicondalgia. Lateral elbow pain is typically increased with resisted wrist extension in those with lateral epicondalgia, but is not for those with RTS.

- C6 Cervical Radiculopathy: C6 Radiculopathy most commonly occurs in middle-aged or elderly patients and is the root with the greatest degree of nearly identical symptoms to those of median nerve compression. [3] Common symptoms associated with C6 radiculopathy , that do not occur in RTS include: Neck and shoulder pain, especially when they occur with concurrent coughing or sneezing. Similarly, back pain, located at the medial border of the scapula is characteristic of a radiculopathy, and is not expected in RTS. Night pain, a common complaint of a patient with RTS, occurs less often with a patient suffering from radiculopathy, daytime pain with arm use is the usual complaint. Patients with acute cervical radiculopathy may c/o night

symptoms. If the sixth cervical nerve is affected, there may be weakness of elbow flexion and wrist extension, the biceps reflex may be lost or reduced, and eletromyographic (EMG) studies will show denervation out of radial nerve territory if the cause of the disorder is cervical nerve root damage. [3] Finally, utilizing the Semmes-Weinstein sensory test, the clinician would note a sensory loss of the C6 dermatome (thumb and lateral boarder of the upper extremity running to the neck), rather than the expected loss at the thumb, index, middle and radial half of the 4th digit. For further information regarding C6 radiculopathy, please refer to the cervical radiculopathy standard of care.

Evaluation / Assessment:

Establish Diagnosis and Need for Skilled Services

Patients diagnosed with RTS will benefit from conservative treatment with therapy to assist in minimizing impairments, improving functional status, and reducing the need for surgical intervention.

Potential Problem List (Identify Impairment(s) and/ or dysfunction(s)):

- Pain in lateral elbow and forearm
- Paresthesias: numbness and/or tingling, which can impair the patient's fine motor control of affected digits
- Declined grip and/or pinch strength in affected hand
- Declined endurance of affective hand for repetitive activity
- Declined functional use of affective hand for ADL tasks
- Declined knowledge of ergonomic education, proper body mechanics and joint protection during ADL's, and in the work environment

Prognosis

Clinical practice has shown that patients will have different outcomes in terms of pain relief and sensory return, strength and function. For the purposes of this standard, relevant clinical improvement is defined as significant relief of pain and paraesthesia by at least 50% of the baseline level, or the improvement of muscle weakness resulting in improvement in quality of life and functional status. It is difficult to make definitive conclusions about the outcomes of conservative interventions for RTS due to variations in outcome measures, the severity of RTS and inconsistencies in duration, type of intervention, and follow-up time for interventions. If symptoms are not adequately improved, or if symptoms are worsening as noted by patient's subjective report, and therapist's objective measurements, then the therapist should report these findings back to the referring physician. Patients with denervation/marked weakness typically have a guarded prognosis with conservative management.
It has been reported neurodynamic testing may be a useful examination procedure and mobilization may be useful for intervention for patients who have lateral elbow pain. [6]

Outcomes of patients who elect to have surgical intervention for their RTS are quite variable. [1, 3, 5, 8, 9]

Goals of rehabilitation intervention

- Resolve symptoms of radial tunnel syndrome and maximize pain relief with ADLs
- Regain independence with ADL/leisure/work tasks
- Regain radial nerve glide without compression
- Goals will be measurable and reassessed every 30 days
- Goals will reflect individual patient's functional impairments in ADL's, leisure and/or work tasks
- Goals will include patient's ability to follow home program
- Goals to reflect patient's education of body mechanics and ergonomics, including the avoidance of provoking postures and activities.
- If splinting is involved in the treatment program, goals will reflect the patient's independence in their wearing schedule, and the care and hygiene of splints.

Age / Other Specific Considerations

RTS may occur at any age but is typically seen in younger patients.

Treatment Planning / Interventions

Established Pathway	___ Yes, see attached.	_X__ No
Established Protocol	___ Yes, see attached.	__X_ No

Interventions
This section is intended to capture the most commonly used interventions for this case type/diagnosis. It is not intended to be either inclusive or exclusive of appropriate interventions.

Avoiding repetitive and excessive movement at the elbow and wrist lessens pain. Short term splinting of the elbow and wrist limits movement and irritation of the radial nerve.

Splinting: Splinting of the wrist in the extension is the initial intervention in the conservative treatment of RTS to decrease irritation of the radial nerve with extension. [4]Typically pre-fabricated Velcro closed wrist splints are used. The treating occupational or physical therapist typically fits this. (Please note: Patients with RTS may be referred for only a prefabricated splint for the management of their RTS. In this case the prefabricated splint is fit and applied by an orthopedic technician upon receipt of the prescription from the MD. Please refer to the prefabricated wrist splint standard of care for specific details.)

The wearing schedule of the splint is primarily recommended for nighttime use. Patients who are having complaints of constant symptoms, or who have pain and or sensory changes with activity are instructed to wear the splint at work or during highly resistive and repetitive motions. The

patient is generally instructed to continue with the splint-wearing schedule for 4 to 6 weeks, and then gradually decrease splint use over the subsequent 4 weeks. Length of time for splint use may also be determined by the causes of the individual's RTS's and their response to treatment.

If a patient is unable to comfortably fit into a pre- fabricated splint, or if the correct wrist position cannot be achieved due to wrist deformity, or unusual wrist size, a custom orthoplast splint may be fabricated. Either an occupational therapist or physical therapist fabricates this custom splint for the patient. As with the pre-fabricated splint, the wrist should be placed in 15 degrees of extension position.

Another conservative splinting option for those with RTS, if the wrist splint does not provide adequate pain relief, is to place the upper extremity in an elbow splint at 90 degrees elbow flexion, forearm in full supination, and wrist at neutral. The splint is worn with ADLs and at rest. It is removed for hygiene and ROM. This position places the radial nerve in the position of least compression**.** [4]

Ergonomic education: Repetitiveness of work tasks, and poor posture during repetitive tasks are commonly cited risk factors for the development of RTS. (As discussed above, during the assessment of these patients, occupational tasks and the patient's posture during these activities should be identified.) On-going education should include avoidance of regular force of at least 1 kg more than 10 times per hour, static work that includes a position of constant elbow extension ROM between 0 and 45 degrees and complete elbow extension associated with pronation and supination of the forearm. It is important to evaluate the work environment and to suggest alternatives such as ergonomically designed workstations designed to limit postural stresses.

Nerve-Gliding exercises: To perform radial nerve glide the patient stands in a relaxed position, depresses the shoulder, IR (internally rotates) the arm and flexes the wrist, lateral cervical flexion to the contralateral side, and then extend from the shoulder. Since no paresthesia or dysesthesia are seen with RTS and nerve gliding care must be taken not to over elongate the nerve. The glide should only be performed to the point were soft tissue tension is felt then back off to the point of tension. The patient then progresses the glide as soft tissue tension decreases.

Modalities: Modalities such as ultrasound, fluidotherapy, superficial heat, or cryotherapy have been used in the conservative treatment of RTS. It should be noted however, that there are inconclusive findings to support or refute the efficacy of these modalities, and more research is required to determine the therapeutic effects of ultrasound. Please refer to specific BWH Rehabilitation modality standards of care for general information on each modality.

Stretching / Strengthening Program: Stretching exercises utilizing the Mills Stretch to help elongate shortened muscles. A precaution with stretching is overstretching may increase compression on the nerve. The strengthening component of treatment is geared toward correcting muscle imbalance and proximal weakness. Initiate isometrics initially to decrease compression forces on the nerve. Progress to PRE's (progressive resistive exercises) to strengthen functional muscle groups not isolated muscle groups. Endurance is the key for the RTS strength program.

Frequency & Duration

- Frequency of hand therapy for the conservative management of RTS is 1-2x/wk for 6 weeks, or as indicated by patients' status and progression. Most patients should meet their clinical goals within 6 visits or 2 months of therapy depending upon severity of presenting signs and symptoms. Progression and improvement will be indicated by the achievement of established short-term goals, and the elimination of symptoms per patient reports, subjective, objective testing.

- Duration of each treatment session is dictated by the patient's needs.

Patient / Family Education

- Instruction of home program with verbal and written instructions
- Instruction on proper radial nerve gliding techniques where the patient will identify the point of minimal tension and then back off from the glide to prevent over-stretch
- Expected outcome from conservative therapy regime
- Identification of patient-centered goals
- Education of the patient that conservative treatment program at home may last 3 to 6 months prior to consideration for surgical release
- Splint don/doff, wearing schedule and hygiene
- Education on RTS, basic anatomy and causes of compression

Recommendations and Referrals to Other Providers

- Pt will be referred back to referring physician/surgeon should symptoms persist or worsen.

Re-evaluation / assessment

Standard Time Frame

- Goals will be reassessed every 30 days

Other Possible Triggers

- A significant change in symptoms that has reduced patient's baseline functional level
- If goals are met prior to 30 day interval
- Discharge from therapy program

Discharge Planning

Discharge planning begins at the initial evaluation of the patients as the treatment planned frequency are initiated and prognosis is determined.

Commonly Expected Outcomes at Discharge

- Upon discharge from therapy the patient should be independent with their home program and have returned to their maximal premorbid level of function
- Discharge from therapy with a referral back to the MD if the patient has regressed and/or plateaued with intervention. Include a progress note to MD in regard to treatment interventions utilized in therapy and patients response to these interventions.

Transfer of Care (if applicable)

Should symptoms persist and/or increase, pt to be referred back to patients PCP or specialist who referred patient to therapy.

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