CARPAL TUNNEL DATA COLLECTION FORM

Today's Date: ☐☐ / ☐☐ / ☐☐☐☐ **Initial Data Point**: ☐ New Patient Appt ☐ Follow-Up

HISTORY (Initial Only)

Patient Sex (circle): Male / Female **Patient Age (yrs):** _____ **BMI:**_____ **Involved Side:** O Rt O Lt O Bilat

Duration of Current Episode:_____days **Dominant Arm**: O Right O Left

Have you had this problem before? O Yes O No **If yes, #**____ **& how long**:_____ **Form filled out for:** O Right O Left

Prior Surgery? O Yes O No **Date:** ☐☐ / ☐☐ / ☐☐☐☐ **Procedure**:_____ **Did it help?** O Yes O No

Prior Injection for CTS? O Yes O No **Did it help?** O Yes O No

Do you work at a job requiring keyboarding? O Yes O No **Was your injury work related?** O Yes O No

Do your symptoms improve with moving, "shaking", or positioning your hands or wrists? OYes/Improves O No Change or Worsens

Other symptoms (check and circle all that apply even if unrelated): O Neck O Thoracic O Shoulder: unilat / bilat

O Arm: unilat / bilat O Elbow: unilat / bilat O Forearm: unilat / bilat O Wrist: unilat / bilat O Hand: unilat / bilat

Comorbidities: O DM O CVD O Kidney Dis O Thyroid Dis O Depression O Cervical Radiculopathy: Current / Past / Never

Risk Factors: O Age (+>45yrs) O BMI (see above) (+ >28Kg/M^2) O Industrial work O Female Gender Total Risk Factors= ___/4__

Medications For: O Thyroid O Diabetes O Depression O Other musculoskeletal pain O Other:_____

PHYS EXAM: **(Initial Only)**

Reflexes: ☐ Not Indic
C5:☐Nl ☐Dec ☐Inc
C6:☐Nl ☐Dec ☐Inc
C7:☐Nl ☐Dec ☐Inc

Dermatomes (C5-T1)
☐ Not Indicated
☐ Normal ☐ Abnormal
If abnormal, which dermatome(s)(circle):
C5 C6 C7 C8 T1

Myotomes (C5-T1)
☐ Not Indicated
☐ Normal ☐ Abnormal
If abnormal, which myotome(s): (circle)
C5 C6 C7 C8 T1

Nerve Fields (check here if not indicated ☐)
Median ☐ Normal ☐ Abnormal
Radial ☐ Normal ☐ Abnormal
Ulnar ☐ Normal ☐ Abnormal
Other ☐ Normal ☐ Abnormal (nerve: _____)

Neck clearing: ☐ Neck symptoms only
☐ Reproduction of UE sxs.
☐ No symptoms
Grip Strength: Uninvolved= _____ Kg
Involved= _____ Kg

Phalen's Test ☐ + ☐ — **Carpal Compression Test** ☐ + ☐ —
Wrist Ratio Index: AP width:_____ **cm; Mediolateral width:** _____**cm; Index=** _____
CTS Clinical Prediction Rule (initial visit only):= ___/5

Time	Interventions				Grip	NPRS (0-10)	CTS SSS Score	CTS FSS Score
	1	2	3	4	R / L			
Initial Visit								
2 Wk								
3 Wk								
4 Wk								
5 Wk								
6 Wk								
O **Last Or** O **D/C**								

INTERVENTIONS

1. Patient education/instruction
2. PROM
3. AROM
4. PREs – wrist extensors
5. PREs – scapular muscles
6. PREs – other
7. Isometric Exercise
8. Eccentric Exercise
9. Mob - Spine
10. Mob – Shoulder
11. Mob – Elbow
12. Mob - Wrist / Hand
13. Manip – Neck
14. Manip - Tx Spine / Ribs
15. Manip - Elbow
16. Manip - Wrist / Hand
17. AROM/PROM - Spine
18. E-Stim for pain
19. E-Stim for strengthening
20. Ultrasound
21. Hot Packs
22. Cryotherapy
23. Ionto
24. Soft Tissue – neck
25. Soft Tissue – Scapular
26. Soft Tissue - Thoracic
27. Soft Tissue - Elbow & below
28. Wrist Splint:_____
29. Elbow Strap
30. Other:_____
31. Other:_____
32. Other:_____

Examiner: ☐ Licensed PT ☐Student ☐ Both **Treater**: ☐ Licensed PT ☐ Student ☐ Both

First visit: ☐☐ / ☐☐ / ☐☐☐☐ **Total number visits**: _____ **Total wks in PT:** _____ **SPT Last Name:**_____

Last visit: ☐☐ / ☐☐ / ☐☐☐☐ **Last visit:** ☐ Discharge ☐ Last Available **If a PT student, class of:** _____

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Demographic and Historical Data

Dates: For all dates, use MM / DD / YYYY with a "0" in the first box if the month or day is a single digit. For the "date of symptom onset," if the patient cannot recall an exact or approximate onset, use the first day of the month when the symptoms began. If the patient cannot recall the month, use 01 / 01 / YYYY.

Initial Data Point: Mark whether you are starting with this patient as a new patient, or if you are starting data collection at a follow-up visit.

Duration of Current Episode: Use 30 as the number of days per month if you need to calculate days for longer durations of symptoms

Involved Side and Dominant Arm: Shade in the appropriate circle. **Form filled out for**: Indicate which limb to which the data pertain

Have you had this problem before: Indicate yes or no; **If yes** indicate the number of episodes and duration of the longest episode (as described previously for duration of current episode)

Prior Surgery? Indicate yes or no if a release was done **Procedure:** Indicate type **Did it help:** indicate yes or no, regardless of level of improvement

Prior Injection for CTS? Indicate yes or no **Did it help Did it help?:** indicate yes or no, regardless of level of improvement

Do you work at a job requiring keyboarding? Indicate yes or no **Was your injury work related?** Indicate yes or no

Do your symptoms improve with moving, "shaking", or positioning your hands or wrists? indicate yes or no, regardless of level of improvement

Other symptoms: Check the areas where the patient has any symptoms, even if felt unrelated to primary problem. Then, circle uni for unilateral symptoms and bilat for bilateral symptoms in this region.

Comorbidities: Check any diagnosis that applies to the patient. More than one option may be selected. If the patient has had surgery for the condition, indicate the type of procedure and date.

Risk Factors: Check each indicator and fill in the total number of risk factors (ie. 2/4, 3/4, etc.) Body Mass Index (BMI) is calculated by dividing weight (Kg) by height (meters) squared (kg/m^2). The more risk factors present the more likely the condition is to be present (probability unspecified).

Medications: Fill in completely. Use any information available to complete this section.

Physical Examination Data

NEUROLOGICAL EXAMINATION (Note: You may check "not indicated" for dermatomes/myotomes/reflexes if the patient has no symptoms extending beyond the deltoid insertions bilaterally)

Dermatomes & Nerve Fields: Sensation is tested over key areas of dermatomes C5-T1 and key nerve field points on each limb. After each limb is tested, the patient is asked; "Does that feel the same to you on each side?" If a difference is noted, the area should be explored further to map the extent of the sensory deficit. Results are recorded as normal or abnormal compared to the non-involved side. If a neuron exam is not indicated, check "not indicated". *for the CTS clinical prediction rule, sensation of D1 (thumb) is assessed by comparing the pad to that of the thenar skin in the same manner previously described.

Reflexes: The biceps brachii reflex tests the C5 nerve root. The reflex is tested by placing the patient's arm in about 45° of flexion with the muscle relaxed. The examiner strikes the tendon in the cubital fossa, just proximal to its insertion. The thumb may be placed over the tendon to insure proper technique. The brachioradialis reflex primarily tests the C6 nerve root. The arm is positioned as for the biceps reflex. The examiner strikes the tendon at the distal aspect of the radius with the flat edge of the reflex hammer. The triceps reflex is used to test the C7 nerve root. The examiner supports the patient's arm and strikes the triceps tendon just proximal to the olecranon. Each reflex is graded as Normal, Decreased, or Increased.

Myotomes: Key muscles for each cervical nerve root (C5-T1) are tested. Each muscle test is graded as WNL or diminished. The examiner should also note if pain was produced during the muscle test. Muscle testing procedures are outlined in the table below.

Peripheral Nerve Fields: Check the peripheral nerve fields if indicated and check if any are abnormal.

	Key Muscles for MMT	Dermatomal areas	Key Muscle for MSRs
C5	deltoid (shoulder in 90° abduction, resistance against lateral upper arm into adduction)	Mid-deltoid	biceps brachii (**C5**, C6)
C6	biceps brachii (elbow @ 90° flex with forearm supinated, resist against lower forearm into ext) extensor carpi radialis longus/brevis (wrist extended/ radially deviated with forearm pronated, resistance against dorsum of hand into flexion/ulnar deviation)	radial aspect of 2nd metacarpal/ digit	brachioradialis (C5, **C6**)
C7	triceps (arm is placed overhead with elbow slightly flexed, resistance against forearm into flexion) flexor carpi radialis (wrist flexed/radially deviated with forearm supinated, resist against thenar eminence into extension/ulnar deviation)	dorsum of 3rd finger	triceps (**C7**)
C8	abductor pollicis brevis (thumb placed in abduction, resistance against proximal phalanx into adduction)	med aspect of 5th finger	(**C8**-T1)
T1	first dorsal interossei (index and middle finger are separated, resistance against the medial aspect of proximal phalanx of the index finger into adduction)	medial forearm	(C8-**T1**)

*** The nerve root in bold is the primary nerve root assessed by the MSR.

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Neck Clearing Exam: Includes AROM with overpressures (flex, ext, SB bilat) and bilateral spurling's test. After performing all AROM with overpressures and Spurling's Test bilaterally, note whether you could reproduce neck symptoms, UE symptoms that reproduced the patient's symptoms, or no symptoms.

> **Spurling's Test:** The patient is seated and is asked to side bend and slightly rotate the head to the painful side while the examiner places a compression force of approximately 7 kg through the top of the head in an effort to further narrow the intervertebral foramen . The test is considered positive when it reproduces the patient's symptoms. You can check "not indicated" if the patient has no upper extremity or scapular region symptoms.

Grip Strength: Have the patient standing with the elbow in complete extension and the shoulder & radioulnar joints in neutral rotation. Grip strength is assessed bilaterally, first on the uninvolved side and recorded in the physical exam section of this form. Instruct the patient to squeeze the dynamometer maximally and record this measurement. Verbal instructions for maximal grip strength are: "Are you ready? Squeeze as hard as you can….harder…harder…relax!" Follow the same procedure to measure pain-free grip strength on the uninvolved UE. Instruct the patient to squeeze slowly until they just begin to feel discomfort. Record this measurement weekly in the table.

Carpal Compression Test: With the patient in sitting, the elbow flexed 0-30 degrees, and the forearm in supinated position, the patient's wrist and hand are supported in a neutral position. The examiner places both thumbs over the transverse carpal ligament and applies approximately 6 lb of pressure with each thumb. Pressure is maintained for a max of 30 secs. The patient is questioned with regard to symptoms at 15 sec intervals during the 30 sec period. Reproduction of sxs in the cutaneous distribution of the median nerve that is related to the patient's condition is a positive test.

Phalen's Test: With the patient sitting, the elbow flexed 0-30 degrees, and forearm supinated, the patient's wrist and hand are supported in a neutral position. The examiner places the patient's wrist in a position of maximal flexion for a max of 60 seconds. The patient is questioned with regard to sxs at 15-second intervals during the 60 second period. Reproduction or exacerbation of paresthesias or anesthesia in the cutaneous distribution of the median nerve in the hand is a positive test.

Wrist Ratio Index: Measure the AP and mediolateral wrist width in cm. Perform the measurements at the distal wrist crease for both measures. The wrist ratio index is computed by dividing the AP wrist width by the mediolateral wrist width.

CTS Clinical Prediction Rule Findings: Indicate how many of the following findings are present: Age > 45yrs; decrease D1 sensation; SSS Score >1.9; shaking hands relieves symptoms; and wrist ratio index >.67. +LR=18.3 when all 5 tests are positive.

Intervention Data

Interventions: For each week, choose the four most relevant treatments used that week. Although more than four treatments may be used in any given week, please prioritize, and choose those interventions believed to be the most influential in the patients' recovery. Mark the intervention you believe to be the most important as #1, then the next most important as #2, and so on.

NPRS: Ask the patient for an number that best represents their average pain / symptoms over the past 48 hours, with 0 representing "no pain" and 10 representing "worst imaginable" pain.

Symptom Severity Scale (SSS) and Functional Status Scale (FSS): The purpose of the SSS and FSS is to evaluate change over time in patients with CTS. Each statement is rated by the patient on a 1 point (mildest) to five point (most severe) Likert scale. An overall SSS score is obtained by calculating the mean of the 11 individual items. The FSS consists of eight-items related to a variety of activities commonly performed by a broad spectrum of patients (i.e. young and elderly, workers inside and outside the home). Each activity is rated by the patient on 1 (no difficulty) to 5 (cannot do at all) Likert scale. An overall FSS score is obtained by calculating the mean of the 8 individual items. For both scales, a higher overall score represents more severe symptoms or greater disability

Initial Visit / Last or Discharge Visit: Insert the appropriate dates. Indicate "Last" if the patient did not return, circle "Discharge" if the patients completed treatment and was discharged from care.

Total number visit: Insert the total number of PT visits that have been included in data collection (from the start of data collection through the end of data collection). Include visits with a PTA and/or ATC if these visits were performed in the PT clinic.

Total Weeks in PT: Provide the number of weeks of care the patient was followed during data collection (from the start of data collection through the end of data collection).

Primarily Examined By / Treated By: Check the most appropriate box.

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