

## CARPAL TUNNEL SYNDROME INITIAL EVALUATION

### GENERAL INFORMATION:

**Pt name/initials** : LQ  
**Age**: 30 y/o  
**Sex**: Female  
**Address**: Poblacion, Makati City  
**Civil Status**: Single  
**Handedness**: Right  
**Occupation**: Information Technologist (IT)  
**Religion**: Roman Catholic  
**Referring Unit**: Makati Medical Center  
**Referring Dr**: Dr. KJ (Orthopedic Dr.)  
**Date of Consultation (OPD)**: Sept 5, 2020  
**Date of Referral**: Sept 5, 2020  
**Date of IE**: Sept 7, 2020  
**Dx**: ® Carpal Tunnel Syndrome

### HISTORY OF PRESENT ILLNESS (HPI)

Present condition started 2 days ago prior to consultation. Pt reported burning pain (PS=7/10) in her R wrist & tingling sensation in her R forearm & numbness of the 1<sup>st</sup> 3 digits of her R hand w/c disrupted her sleep.

2 wks á pt started feeling worsening Sx, she reports a tingling sensation in her R forearm & numbness on her R hand. Pt tried shaking her R hand & Sx are relieved - cont. for a wk. Pt then starts to feel a burning pain (PS = 3/10). Sx is aggravated d/t flexion of R wrist- working on her desk and/or driving to & from work. She didn't think it was a major problem because shaking her R hand relieves the sensation & she was busy & work that she didn't have the time to get it checked up by a doctor.

On Sept 3, 2020, while she was working on her desk for a big project, pt flexed her R wrist & felt burning pain (PS = 6/10) on her R wrist & tingling in her R forearm & numbness in her R hand. This time, she says that shaking does not relieve the sensation at all so she took some Ibuprofen & pain was somehow relieved. She then went on with her work until 5pm. As soon as she returned home at 6pm, she fell asleep and was woken up later that p.m by the burning pain (PS = 6/10) in her R wrist & tingling in her R forearm & numbness on her R hand. She again took some Ibuprofen so that she can go back to sleep. Sx worsened the next day (PS = 7/10), making it difficult for the pt to even hold a cup of coffee. Pt considered visiting the doctor because the pain interrupted her sleep for two nights in a row but she ended up taking Ibuprofen again just to make the pain somehow tolerable.

On September 5, 2020, pt consulted & Dr. KJ at Makati Medical Center complaining of burning pain (PS = 7/10) in her R wrist & tingling in her R forearm & numbness in her R hand. Upon consultation, the doctor performed a nerve conduction test & Dx the pt & R CTS. He referred the pt to a PT.

On September 7, 2020, the pt visited a PT & upon evaluation, it was noted that the pt has a weakened grip in her R hand and mm weakness in her R forearm d/t immobility 2 ° to pain, numbness & tingling. The PT dx the pt & R CTS.

### PRESENT MEDICATION:

DRUG	DOSAGE	INDICATION
Ibuprofen	(200-400mg) q 4-6 hours as needed	Pain Relief

### PAST MEDICAL HISTORY (PMHX)

- (-) HTN
- (-) DM
- (-) Trauma
- (-) FX

- (-) RA/OA
- (-) Osteoporosis

### FAMILY MEDICAL HISTORY (FMHX)

	Paternal	Maternal
<b>HTN</b>	(-)	(-)
<b>Heart Disease</b>	(-)	(+)
<b>DM</b>	(+)	(-)
<b>RA</b>	(-)	(-)
<b>OA</b>	(-)	(-)
<b>Osteoporosis</b>	(-)	(-)

### PERSONAL/SOCIAL & ENVIRONMENTAL HISTORY (PSEHX)

<b>Personality</b>	Introverted
<b>Lifestyle</b>	Sedentary
<b>Smoking?</b>	Yes <ul style="list-style-type: none"> <li>• 1 Pack/day x 5 years of smoking = <u>5 Pack Years</u></li> </ul>
<b>Alcoholic?</b>	Yes <ul style="list-style-type: none"> <li>• Occasional drinker</li> <li>• Prefers Beer</li> </ul>
<b>Food Preference</b>	Unhealthy <ul style="list-style-type: none"> <li>• Junk Food</li> <li>• Fast food</li> <li>• Doesn't eat vegetables</li> </ul>
<b>Living Arrangement</b>	Alone in a condo unit
<b>Work Environment</b>	<ul style="list-style-type: none"> <li>• Desk Height is in the level of pt armpit</li> <li>• Office is Airconditioned</li> </ul>
<b>Mode of Transportation (Work to Home)</b>	Personal car <ul style="list-style-type: none"> <li>• Distance: 30 mins away</li> </ul>
<b>Hobbies</b>	<ul style="list-style-type: none"> <li>• Playing computer games</li> <li>• Vlogger - does Mukbang videos on social media once a week</li> </ul>

### SUBJECTIVE

**C/C:** "My R hand hurts (PS= 7/10) so much. The pain started 1 week ago tapos tolerable naman hanggang sa lumala nang lumala yung sakit pag nagwo-work ako sa desk ko sa office or when I drive. I just took Advil every time na masakit siya and I just continued with my work. Pero hindi ko na talaga kaya yung sakit ngayon."

**PT Translation:** Pt c/o of burning pain (PS = 7/10) on her ® wrist & hand w/c is aggravated every time she works on her desk or when she drives. Upon taking Advil, pain is relieved & she continues c her work. At present, pt is unable to tolerate the pain.

**Pt's Goal:** To stop the pain as soon as possible to be able continue with work

**Pt's Attitude:** Pt was a bit shy but cooperated well with the whole treatment.

**OBJECTIVE**

**Vital Signs:**

<b>VS</b>	<b>Á</b>	<b>DURING</b>	<b>Ḑ</b>
<i>BP</i>	118/76 mmHg	120/80 mmHg	118/76mmHg
<i>HR</i>	72 bpm	84 bpm	79bpm
<i>RR</i>	18 cpm	25 cpm	20 cpm
<i>T°</i>	36.8 °C		

Findings: ↑ BP during exercise

Significance: monitor BP while pt performs exercises

**OCULAR INSPECTION:**

<b>Mode of Ambulation</b>	amb ḑ AD
<b>Body Type</b>	Endomorph
<b>LOC</b>	Alert
<ul style="list-style-type: none"> <li>• (+) Postural Deviation (See postural analysis)</li> <li>• (+) Redness</li> <li>• (-) Swelling</li> <li>• (-) Scar/Wound in R arm</li> <li>• (-) Skin Trophic Changes</li> <li>• (-) Arm sling</li> </ul>	

**PALPATION**

<ul style="list-style-type: none"> <li>• Hyperthermic R wrist</li> <li>• (+) mm guarding on R → wrist flex</li> <li>• (+) Tenderness - Grade 3</li> <li>• (+) mm spasm</li> <li>• (-) Crepitus</li> <li>• (-) Edema</li> <li>• (-) Tightness</li> <li>• (-) Taut Band</li> </ul>
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**STONE ASSESSMENT**

<ul style="list-style-type: none"> <li>• Hypotonic @ R forearm</li> </ul> <p>Findings: (+) tension in mm in the R forearm            Significance: (+) weakness in the R arm d/t immobility 2 ° to pain</p>
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**ROM:**

All jts of (B) UE & LE, head, neck & trunk were assessed actively & passively, pain-free, WNL, & c N End Feel except for the ff:

<b>JOINT</b>	<b>(N) VALUE</b>	<b>ACTIVE</b>	<b>PASSIVE</b>	<b>ENDFEEL</b>
<b>R Wrist Flex</b>	<b>0-75 °</b>	<b>0-50 °</b>	<b>0-50°</b>	<b>EMPTY</b>
<b>R CMC Flex</b>	<b>0-50 °</b>	<b>0-20 °</b>	<b>0-50 °</b>	
<b>R 2<sup>nd</sup> MCP Flex</b>	<b>0-90 °</b>	<b>0-40 °</b>	<b>0-90 °</b>	
<b>R 3<sup>rd</sup> MCP Flex</b>	<b>0-90 °</b>	<b>0-40 °</b>	<b>0-90 °</b>	

Findings: (+) LOM in AROM of R wrist, CMC, 2<sup>nd</sup> & 3<sup>rd</sup> MCP Flex

Significance: (+) weakness of R wrist & hand flexors

**MMT:**

All major mm of (B) UE and LE, head, neck & trunk were grossly graded 5/5, except for the ff w/c were assessed using the Break Test :

<b>MOVEMENT</b>	<b>(R)</b>
<b>R Wrist Flex</b>	<b>3/5</b>
<b>R CMC Flex</b>	<b>3/5</b>
<b>R 2<sup>nd</sup> MCP Flex</b>	<b>3/5</b>
<b>R 3<sup>rd</sup> MCP Flex</b>	<b>3/5</b>

**Grip Assessment**

**BP Cuff set @ 20 mmHg**

	<b>R</b>	<b>L</b>	<b>Difference</b>
<b>Trial 1</b>	30 mmHg	120 mmHg	60 mmHg
<b>Trial 2</b>	30 mmHg	125 mmHg	95 mmHg
<b>Trial 3</b>	30 mmHg	120 mmHg	60 mmHg
<b>Average</b>	<b>3 mmHg</b>	<b>121.66 mmHg</b>	<b>71.66 mmHg</b>

**Findings:** R wrist & hand flexors only has palpable contraction; only the \$ 4<sup>th</sup> & 5<sup>th</sup> MCP is able to flex

**Significance:** pt has ↓ mm strength & grip in R wrist & hand

**Sensory Assessment:** 70% intact sensation on the R 1<sup>st</sup>-3<sup>rd</sup> digit as to light touch, pain, and pressure for 10/10 trials using cotton, tip of paperclip and thumb

**SPECIAL TEST:**

- (+) Phalen’s Test @ R Wrist & Hand
- (+) Carpal Compression Test
- (+) Reverse Phalen’s Test
- (+) Benediction Sign
- (-) ULNT2

**Postural Assessment:**

- (+) Kyphosis
- (+) Forward Head Posture
- (+) R Ulnar Deviation

# PTA Static Postural Assessment

Client Name \_\_\_\_\_ Date \_\_\_\_\_

## Anterior & Posterior View

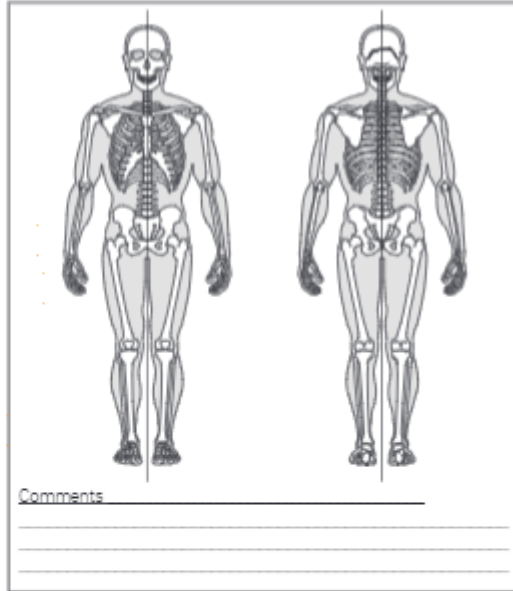
### Lower Body

- Foot & ankle complex**
- |           |                          |                          |
|-----------|--------------------------|--------------------------|
| Toe - Out | <input type="checkbox"/> | <input type="checkbox"/> |
| Toe - In  | <input type="checkbox"/> | <input type="checkbox"/> |
| Pronation | <input type="checkbox"/> | <input type="checkbox"/> |
| Flat Feet | <input type="checkbox"/> | <input type="checkbox"/> |
| High Arch | <input type="checkbox"/> | <input type="checkbox"/> |

- Knee/Hip**
- |             |                          |                          |
|-------------|--------------------------|--------------------------|
| Knock Knees | <input type="checkbox"/> | <input type="checkbox"/> |
| Bow Legs    | <input type="checkbox"/> | <input type="checkbox"/> |

### Upper Body

- |          |           |                          |                          |
|----------|-----------|--------------------------|--------------------------|
| Spine    | Scoliosis | <input type="checkbox"/> | <input type="checkbox"/> |
| Scapula  | Deviation | <input type="checkbox"/> | <input type="checkbox"/> |
| Shoulder | Deviation | <input type="checkbox"/> | <input type="checkbox"/> |
| Head     | Tilt      | <input type="checkbox"/> | <input type="checkbox"/> |
|          | Rotation  | <input type="checkbox"/> | <input type="checkbox"/> |



## Lateral View

### Lower Body

- |        |                      |                          |                          |
|--------|----------------------|--------------------------|--------------------------|
| Ankle  | Dorsiflexion         | <input type="checkbox"/> | <input type="checkbox"/> |
|        | Plantarflexion       | <input type="checkbox"/> | <input type="checkbox"/> |
| Knee   | Flexed               | <input type="checkbox"/> | <input type="checkbox"/> |
|        | Hyperextended        | <input type="checkbox"/> | <input type="checkbox"/> |
| Pelvis | Anterior translation | <input type="checkbox"/> | <input type="checkbox"/> |

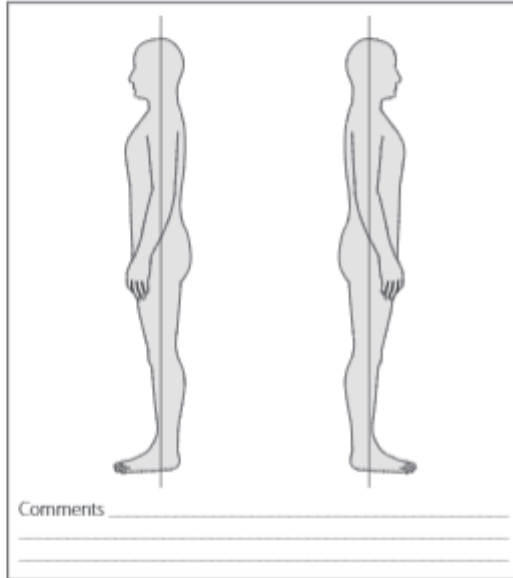
- |                               |                          |                          |
|-------------------------------|--------------------------|--------------------------|
| Is the deviation symmetrical? | <input type="checkbox"/> | <input type="checkbox"/> |
| Tilt: Anterior                | <input type="checkbox"/> | <input type="checkbox"/> |
| Posterior                     | <input type="checkbox"/> | <input type="checkbox"/> |

### Upper Body

- |              |                     |                                     |                          |
|--------------|---------------------|-------------------------------------|--------------------------|
| Lumbar spine | Lordosis            | <input type="checkbox"/>            | <input type="checkbox"/> |
|              | Flat                | <input type="checkbox"/>            | <input type="checkbox"/> |
| Thorac spine | Kyphosis            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|              | Flat                | <input type="checkbox"/>            | <input type="checkbox"/> |
| Trunk        | Rotation (Symmetry) | <input type="checkbox"/>            | <input type="checkbox"/> |

- |               |         |                                     |                          |
|---------------|---------|-------------------------------------|--------------------------|
| Shoulders     | Forward | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Head position | Forward | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|               | Back    | <input type="checkbox"/>            | <input type="checkbox"/> |

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## OUTCOME MEASURE: BCTQ

### Boston Carpal Tunnel Syndrome Questionnaire (BCTQ)

#### (一) Symptom severity scale (11 items)

	1	2	3	4	5
1. How severe is the hand or wrist pain that you have at night?	Normal	Slight	Medium	<del>Severe</del>	Very serious
2. How often did hand or wrist pain wake you up during a typical night in the past two weeks?	Normal	Once	2 to <del>3</del> times	4 to 5 times	More than 5 times

#### (二) Functional status scale (8 items) :

	No difficulty	Little difficulty	Moderate difficulty	Intense difficulty	Cannot perform the activity at all due to hands and wrists symptoms
Writing	1	2	3	4	<del>5</del>
Buttoning of clothes	1	2	3	<del>4</del>	5
Holding a book while reading	1	2	3	<del>4</del>	5
Gripping of a telephone handle	1	2	3	<del>4</del>	5
Opening of jars	1	2	3	4	<del>5</del>
Household chores	1	2	3	4	<del>5</del>
Carrying of grocery basket	1	2	3	<del>4</del>	5
Bathing and dressing	1	2	3	4	<del>5</del>

**Findings:** Pt got a total score of 47/50 in the Sx severity scale & 36/40 in the Functional Status scale  
**Significance:** Sx management must be prioritized

**ADLs - KATZ INDEX OF INDEPENDENCE IN ACTIVITIES OF DAILY LIVING**

Patient Name: LQ Date: Sep 7 2020  
 Patient ID # \_\_\_\_\_

<b>Katz Index of Independence in Activities of Daily Living</b>		
Activities Points (1 or 0)	Independence (1 Point)	Dependence (0 Points)
	NO supervision, direction or personal assistance.	WITH supervision, direction, personal assistance or total care.
<b>BATHING</b> Points: <u>1</u>	(1 POINT) Bathes self completely or needs help in bathing only a single part of the body such as the back, genital area or disabled extremity.	(0 POINTS) Need help with bathing more than one part of the body, getting in or out of the tub or shower. Requires total bathing
<b>DRESSING</b> Points: <u>1</u>	(1 POINT) Get clothes from closets and drawers and puts on clothes and outer garments complete with fasteners. May have help tying shoes.	(0 POINTS) Needs help with dressing self or needs to be completely dressed.
<b>TOILETING</b> Points: <u>1</u>	(1 POINT) Goes to toilet, gets on and off, arranges clothes, cleans genital area without help.	(0 POINTS) Needs help transferring to the toilet, cleaning self or uses bedpan or commode.
<b>TRANSFERRING</b> Points: <u>1</u>	(1 POINT) Moves in and out of bed or chair unassisted. Mechanical transfer aids are acceptable	(0 POINTS) Needs help in moving from bed to chair or requires a complete transfer.
<b>CONTINENCE</b> Points: <u>1</u>	(1 POINT) Exercises complete self control over urination and defecation.	(0 POINTS) Is partially or totally incontinent of bowel or bladder
<b>FEEDING</b> Points: <u>1</u>	(1 POINT) Gets food from plate into mouth without help. Preparation of food may be done by another person.	(0 POINTS) Needs partial or total help with feeding or requires parenteral feeding.
<b>TOTAL POINTS:</b> <u>6</u> <b>SCORING:</b> 6 = High ( <i>patient independent</i> ) 0 = Low ( <i>patient very dependent</i> )		

Source:  
 by this: Best Practices in Nursing Care to Older Adults, The Hartford Institute for Geriatric Nursing, New York University, College of Nursing, [www.hartfordign.org](http://www.hartfordign.org)

**IADLs - LAWTON'S INSTRUMENTAL ACTIVITIES OF DAILY LIVING SCALE**

Patient Name: LQ  
 Patient ID # \_\_\_\_\_

Date: Sep 7 2020

LAWTON - BRODY INSTRUMENTAL ACTIVITIES OF DAILY LIVING SCALE (I.A.D.L.)			
Scoring: For each category, circle the item description that most closely resembles the client's highest functional level (either 0 or 1).			
<b>A. Ability to Use Telephone</b>		<b>E. Laundry</b>	
1. Operates telephone on own initiative-looks up and dials numbers, etc.	1	1. Does personal laundry completely	
2. Dials a few well-known numbers	1	2. Launders small items-rinses stockings, etc.	
3. Answers telephone but does not dial	1	3. All laundry must be done by others	
4. Does not use telephone at all	0		
<b>B. Shopping</b>		<b>F. Mode of Transportation</b>	
1. Takes care of all shopping needs independently	1	1. Travels independently on public transportation or drives own car	
2. Shops independently for small purchases	0	2. Arranges own travel via taxi, but does not otherwise use public transportation	
3. Needs to be accompanied on any shopping trip	0	3. Travels on public transportation when accompanied by another	
4. Completely unable to shop	0	4. Travel limited to taxi or automobile with assistance of another	
		5. Does not travel at all	
<b>C. Food Preparation</b>		<b>G. Responsibility for Own Medications</b>	
1. Plans, prepares and serves adequate meals independently	1	1. Is responsible for taking medication in correct dosages at correct time	
2. Prepares adequate meals if supplied with ingredients	0	2. Takes responsibility if medication is prepared in advance in separate dosage	
3. Heats, serves and prepares meals, or prepares meals, or prepares meals but does not maintain adequate diet	0	3. Is not capable of dispensing own medication	
4. Needs to have meals prepared and served	0		
<b>D. Housekeeping</b>		<b>H. Ability to Handle Finances</b>	
1. Maintains house alone or with occasional assistance (e.g. "heavy work domestic help")	1	1. Manages financial matters independently (budgets, writes checks, pays rent, bills, goes to bank), collects and keeps track of income	
2. Performs light daily tasks such as dish washing, bed making	1	2. Manages day-to-day purchases, but needs help with banking, major purchases, etc.	
3. Performs light daily tasks but cannot maintain acceptable level of cleanliness	1	3. Incapable of handling money	
4. Needs help with all home maintenance tasks	1		
5. Does not participate in any housekeeping tasks	0		
Score	3	Score	3
Total score <sup>3</sup>			
A summary score ranges from 0 (low function, dependent) to 8 (high function, independent) for women and 0 through 5 for men to avoid potential gender bias.			

Source: *ny this*: Best Practices in Nursing Care to Older Adults, The Hartford Institute for Geriatric Nursing, New York University, College of Nursing, [www.hartfordin.org](http://www.hartfordin.org).

## ASSESSMENT

**Medical Dx:** R CTS c a duration of Sx for 2wks

**PT Dx:** G56.01 - ↓ROM & weakness of R 1<sup>st</sup>-3<sup>rd</sup> digit flex d/t numbness c decreased ROM on R wrist flex d/t pain

**PT Impression:** Pt Sx is consistent c her medical Dx - R CTS. She works as an IT. She presented c ↓ROM in R wrist & hand flex. She also complained of burning pain (PS = 7/10) in her R hand w/c is accompanied c a tingling sensation in her R forearm & numbness in the

1<sup>st</sup> 3 digits of her R hand. She also has weakened grip strength and has difficulty performing IADLs (see attached file). Pt is highly independent in performing ADLs since she uses her L hand. Her Sx indicate a mild CTS in her R hand.

**Rehab Potential:** Ff 3 wks. of Nerve Mobilization Techniques along c therapeutic exercises, the pt is expected to:

General Prognosis:

- Pt. has excellent potential to meet expected outcomes of therapy due to his outstanding motivation to return to work.
- Clinical practice suggests that pt will have different (+) outcomes in terms of pain relief and sensory return, strength and function.

Problem List:

1. Pain on R wrist (PS = 6/10)
2. LOM → R wrist & hand flex
3. Weakness of R wrist & hand flexors
4. ↓ Grip Strength of R hand
5. Postural Deviation
6. 6/6 on Katz Index of Independence in ADL
7. 6/8 on Lawton-Brody IADL Scale

Short Term Goals:

1. Pt will claim a ↓ of pain from PS = 7/10 to PS = 4/10 p 2 wks of PT sessions
2. Pt will demonstrate ↑ ROM → R wrist flex by 40 p 2 wks of PT sessions
3. Pt will demonstrate ↑ ROM → R CMC flex by 40 p 2 wks of PT sessions
4. Pt will demonstrate ↑ ROM → R 2<sup>nd</sup> & 3<sup>rd</sup> MCP flex by 40 p 2 wks of PT sessions
5. Pt will have ↑ strength of R wrist flex from mm grade 3/5 to 4/5 p 3 wks of PT sessions
6. Pt will have ↑ strength of R CMC flex from mm grade 3/5 to 4/5 p 3 wks of PT sessions
7. Pt will have ↑ strength of R 2<sup>nd</sup> & 3<sup>rd</sup> MCP flex from mm grade 3/5 to 4/5 p 3 wks of PT sessions
8. Pt will have ↑ grip strength by 20 mmHg p 4 wks of PT sessions
9. Pt will demonstrate N head positioning p 4 wks of PT sessions
10. Pt will demonstrate proper posture p 4 wks of PT sessions

Long Term Goal:

1. Pt will be able to work as an IT for 8 hours s pain in her R wrist & numbness in her R 1<sup>st</sup>-3<sup>rd</sup> digits.
2. Pt will regain full ROM → R wrist & hand flex
3. Pt will regain max strength of R wrist & hand flex
4. Pt will regain max grip strength of R hand
5. Pt will be able to maintain N head positioning & proper posture

**PLAN OF CARE**

Interventions:

- *Pt will be seen & treated, 2x/wk as an OP c the following PT Mx:*
  1. PWB on R hand x 15-20mins
  2. Continuous Therapeutic Ultrasound x1.5W/cm<sup>2</sup> x 1Mhz x 5mins on R wrist
  3. TENS x 15-20mins on R wrist flexors
  4. AROMEs on R hand x 10reps x 3sets → wrist flexion
  5. Grip Strengthening Ex. using stress ball x 6SH x 10 reps
  6. PREs using 1lb dumbbell on R hand x 10 reps x 3 sets → wrist

flex

Home Care:

1. Hot compress on R wrist x 15-20mins
2. AROMEs on R hand x 10reps x 3sets → wrist flexion
3. Grip Strengthening Ex. using stress ball x 6SH x 10 reps
4. PREs using 1lb dumbbell on R hand x 10 reps x 3 sets → wrist flexion

Patient Education:

- Remind pt to limit grasping objects tightly or lift c the affected arm.
- Pt will be advised to wear a wrist support at all times, unless undergoing Tx.
- Pt will verbalize importance of adhering to home exercises & PT Mx
- Pt is advised to modify ↑ ht of chair so that desk ht will be level c pt elbow

-----end of note-----

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