

Hand and wrist problems

Hand and wrist problems are very common reasons for presentation in Australian general practice. GP registrars will generally be familiar with the management of common hand and wrist injuries from their ED experience, but are likely to be unfamiliar in the management of less acute problems. GP supervisors can teach their registrars about common hand and wrist conditions, including the approach to a focused clinical assessment, appropriate investigations, and practical management.

<p>TEACHING AND LEARNING AREAS</p> 	<ul style="list-style-type: none"> • Anatomy of the hand • Common hand and wrist presentations in general practice – hand osteoarthritis, volar plate injury, ganglions, fractures, carpal tunnel syndrome, trigger finger, De Quervain's tenosynovitis, Dupuytren's contracture • Approach to clinical examination of the hand and wrist • Rational investigation of hand and wrist symptoms • Practical management of common hand and wrist problems • Indication for, and pathways to, specialist referral, including hand therapists and orthopaedics
<p>PRE-SESSION ACTIVITIES</p>	<ul style="list-style-type: none"> • Murtagh General Practice chapter on 'Pain in the arm and hand'
<p>TEACHING TIPS AND TRAPS</p> 	<ul style="list-style-type: none"> • De Quervain's tenosynovitis is common in new mothers! • Always look at the x-ray yourself • X-ray all significant finger hyperextension injuries to exclude a volar avulsion injury • Ganglions are commonly present but not always the cause of pain – exclude other causes before treating it • Sensation over the thenar eminence is normal in patients with CTS - it is supplied by the palmar cutaneous branch of the median nerve, which branches off proximal to the carpal tunnel • Nerve conduction studies are usually not required for typical CTS symptoms and signs, and is an uncomfortable test • Aspiration and injections of ganglions are ineffective and may cause harm • Joint protection strategies for hand OA • Joint replacements for hand and wrist OA are increasingly being used • Nocturnal splitting is the first line management of CTS • There is a limited role for corticosteroid injections in CTS
<p>RESOURCES</p> 	<p>Read</p> <ul style="list-style-type: none"> • American Family Physician 2016 article Carpal Tunnel Syndrome: Diagnosis and Management • American Family Physician 2013 article Evaluation and Diagnosis of Wrist Pain: A Case-Based Approach • 2012 AFP article Hands, fingers, thumbs: assessment and management of common hand injuries in general practice <p>Watch</p> <ul style="list-style-type: none"> • Hand and wrist examination: McMaster MSK Examination series
<p>FOLLOW UP & EXTENSION ACTIVITIES</p>	<ul style="list-style-type: none"> • Undertake the clinical reasoning challenge and discuss with supervisor

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Clinical Reasoning Challenge

Duc Nguyen, a 45-year teacher, presents to you with a 4-week history of tingling, numbness and pain of his right hand. Duc has no significant PMH. He has been taking ibuprofen with minimal relief.

QUESTION 1. You suspect carpal tunnel syndrome. What are the MOST IMPORTANT features on history to support this diagnosis? List as many as appropriate.

QUESTION 2. What are the MOST IMPORTANT aspects of clinical examination to further support the diagnosis of carpal tunnel syndrome? List as many as appropriate.

QUESTION 3. Examination findings support the diagnosis of carpal tunnel syndrome. What further tests would you arrange at this point? List as many as appropriate.

QUESTION 4. What are the MOST IMPORTANT broad options for management of Duc's symptoms? List up to FOUR management options.

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4

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ANSWERS

QUESTION 1

You suspect carpal tunnel syndrome. What are the MOST IMPORTANT features on history to support this diagnosis? List as many as appropriate.

- Median nerve distribution of symptoms
- Nocturnal pain – waking to shake the hand (flick sign)
- Precipitating event e.g. overuse of the hand
- Weakness of thumb abduction and opposition
- Absence of features of other causes e.g. other neurological symptoms, neck pain, elbow problems

QUESTION 2

What are the MOST IMPORTANT aspects of clinical examination to further support the diagnosis of carpal tunnel syndrome? List as many as appropriate.

- Decreased sensation in median nerve distribution
- Weakness of thumb abduction and opposition and/or wasting of abductor pollicis brevis
- Positive Tinel's test
- Positive modified Phalen's test
- Positive raised hand sign

QUESTION 3

Examination findings support the diagnosis of carpal tunnel syndrome. What further tests would you arrange at this point? List as many as appropriate.

- Nil
- Patients with typical symptoms and signs of carpal tunnel syndrome like Duc do not need confirmatory testing, but USS or nerve conduction studies can be useful to investigate atypical cases

QUESTION 4

What are the MOST IMPORTANT broad options for management of Duc's symptoms? List up to FOUR management options.

- Relative rest from exacerbating activities
- Night splinting
- Corticosteroid injection (likely short-term benefit only)
- Surgical decompression