

Surgery for Carpal Tunnel Syndrome

Definition

Carpal Tunnel Syndrome (CTS) is a condition characterised by attacks of pain, numbness or tingling usually in the distribution of the median nerve (thumb, index, middle and half of ring finger). It is caused by compression of the median nerve as it passes under the ligament that lies across the front of the wrist¹.

Policy

Referral for treatment should be through the MSK service/pathway.

It is the responsibility of referring and treating clinicians to ensure compliance with this policy. Referral proforma should be attached to the patient notes to aid the clinical audit process and provide evidence of compliance with the policy. For patients not meeting the policy criteria, clinicians can apply for funding to the Exceptional Cases Panel by completing the exceptional funding section of the [referral proforma](#)

Policy criteria:

The CCG will **ONLY** fund Carpal Tunnel Surgery in patients diagnosed with Carpal Tunnel Syndrome according to the following criteria:

- The patient has severe neurological symptoms at presentation, for example altered sensation, muscle wasting or weakness of thumb abduction.

OR

- The patient has moderate symptoms as defined below **AND** has not responded to a minimum of 6 months (unless rapidly deteriorating*) of conservative management, including local corticosteroid injections and a compliant trial of nocturnal neutral wrist splints.

Nerve conduction studies and electromyography often do not change management and are, therefore, not routinely funded for patients with a diagnosis of carpal tunnel syndrome. They should only be requested by consultants in secondary care or MSK specialists when they contribute to diagnosis or management.

*If there is evidence of rapidly developing neurological symptoms the patient may be referred earlier

Classification for Severity of Carpal Tunnel Syndrome²:

- Mild: Intermittent paraesthesia with or without pain that may be nocturnal or occurs with a certain hand position.
- Moderate: Paraesthesia that interferes with activities of daily living or causes constant night waking. **And/Or** reversible numbness and/or pain (perhaps by clenching and unclenching of fist or hand shaking).
- Severe: Constant numbness or disabling pain with wasting of thenar muscles.
And/Or weakness of thumb muscles (Abductor Pollicis Brevis and Opponens Pollicis).

Note:

Patients who smoke should be advised to attempt to stop smoking and referred to stop-smoking services – see [stop smoking policy](#).

Rationale and Evidence

- Untreated Carpal Tunnel Syndrome has been shown to resolve or significantly improve in around 44% of cases³.
- Non-surgical treatment, including physical therapy⁴, steroid injection and wrist splinting^{5, 6} show short-term benefit compared with placebo or other non-surgical interventions.
- When conservative treatments are compared with surgery for carpal tunnel syndrome, some studies show comparable outcome for physical therapy^{7,8}, steroid injections⁹⁻¹¹ and splinting¹² with surgery, but others suggest that surgery gives better long-term improvements¹³⁻¹⁶ and it seems appropriate that patients with severe symptoms, and those who have not responded to conservative management, are offered surgery.
- Neurophysiological tests (including nerve conduction studies and electromyography) have not been shown to affect patient management or to predict treatment outcome¹⁷⁻¹⁹.

Estimated number of people affected

Annual incidence of carpal tunnel syndrome has increased in the UK, from 206 per 100,000 in 2000 to 277 per 100,000 in 2013²⁰. Incidence is higher in females (340 per 100,000 in females and 191 in males in 2013) but the female : male ratio has reduced over time (2.36 in 2000 and 1.88 in 2013).

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Glossary

Abduction:	Movement of a body part away from the median plane (of the body, in the case of limbs; of the hand or foot, in the case of digits).
Neurological:	Conditions affecting the nervous system.
Nocturnal splinting:	A support worn on the hand at night.
Paraesthesiae:	Unusual feelings, apart from mere increase, or loss, of sensation, experienced by a patient without any external cause (sometimes described as pins and needles).
Thenar:	The thenar eminence is the body of muscle on the palm of the human hand just beneath the thumb.

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