Placename CCG

Policies for the Commissioning of Healthcare

Policy for surgical treatment of carpal tunnel syndrome

1	**Introduction**
1.1	This document is part of a suite of policies that the CCG uses to drive its commissioning of healthcare. Each policy in that suite is a separate public document in its own right, but will be applied with reference to other polices in that suite.
1.2	This policy is based on the CCGs Statement of Principles for Commissioning of Healthcare (version in force on the date on which this policy is adopted).
2	**Scope and definitions**
2.1	This policy relates to the surgical release of the carpal tunnel as a treatment for carpal tunnel syndrome. Carpal tunnel syndrome (CTS) is a relatively common condition caused by compression of the median nerve within the carpal tunnel in the wrist. This can arise for a variety of reasons, including fluid retention, particularly in pregnancy[2]. This gives rise to pain, numbness or tingling in the thumb, index and middle fingers. In severe cases it may cause nerve damage and weakness/wasting of the muscles of the hand, especially the thumb (thenar wasting). Patients often report their symptoms are worse at night and may disturb sleep. Symptoms do not necessarily progressively worsen and, for some, will resolve. In these cases carpal tunnel syndrome will disappear without treatment or with simple self-care. Non-surgical treatments, such as steroid injections or wrist splints are used to treat mild to moderate symptoms. Surgical release (decompression) of the carpal tunnel may be carried out if non-surgical approaches fail to relieve symptoms.
2.2	The scope of this policy includes requests for decompressing the carpal tunnel by either open or arthroscopic surgical techniques.
2.3	The CCG recognises that a patient may: • suffer from carpal tunnel syndrome, • wish to have a service provided for their condition, • be advised that they are clinically suitable for surgical release of the carpal tunnel, and • be distressed by their condition, and by the fact that they may not

	meet the criteria specified in this commissioning policy. Such features place the patient within the group to whom this policy applies and do not make them exceptions to it.
3	**Appropriate Healthcare**
3.1	The CCG considers that the purpose of surgical release of the carpal tunnel is to improve the health of patients by reducing pain, discomfort and disability. This places them within the category of interventions that accord with the Principle of Appropriateness in the *Statement of Principles*. Therefore these procedures will be commissioned by the CCG if they also satisfy the criteria for effectiveness, cost effectiveness and ethical delivery.
4	**Effective Healthcare**
4.1	The CCG considers that there is sufficient evidence with which to draw firm conclusions regarding the effectiveness of surgical release of the carpal tunnel.
4.2	The CCG considers that surgical release of the carpal tunnel is more effective at relieving symptoms than splinting[1,3,4]. However, splinting can provide relief of symptoms, particularly overnight, for patients with mild to moderate carpal tunnel syndrome and is a relatively simple, low cost intervention[6].
4.3	The CCG recognises that early surgery is likely to be the most effective treatment option if there is evidence of nerve compression or significant functional impairment[3].
4.4	The CCG recognises that there is evidence of good outcomes and high levels of patient satisfaction following surgery.
4.5	Major complications of surgical release are rare. Complications such as, persistent symptoms, reduced grip strength, neurovascular injury and wound complications have been reported - usually in less than 1% of surgical patients. However scar tenderness and pillar pain are reported more frequently and may persist for up to two years[8].
5	**Cost Effectiveness**
5.1	The CCG recognises that up to a third of cases of carpal tunnel syndrome may resolve spontaneously[2]. The CCG also recognises that carpal tunnel syndrome in pregnancy often resolves within 12 weeks of delivery, but that 50% of women have persisting symptoms at 1 year [2].

5.2	The CCG considers that there is some evidence for the effectiveness and cost effectiveness of non-surgical management options. For some patients, single local corticosteroid injection has been shown to be effective for short term symptomatic relief in mild to moderate cases but evidence suggests repeat injections may not provide significant added clinical benefit [5]. For some patients, wrist splinting in the neutral position may alleviate the symptoms of carpal tunnel syndrome with few complications. One study in which patients were randomised to splinting or to surgery reported splinting provided symptom relief and avoided surgery for 37% of patients[6]. However there is limited evidence on its effectiveness in comparison with other methods of conservative management or for the effectiveness of different designs or regimes of splint wearing[7].
5.3	The CCG considers that in mild to moderate cases, management of carpal tunnel syndrome by conservative methods, which may include splinting, activity modification and, if appropriate, single local corticosteroid injection, before considering surgery, represent the most cost effective treatment strategy.
5.4	The CCG recognises that the role of electrophysiology in the diagnosis/ treatment of carpal tunnel syndrome is the subject of ongoing debate. BOA/RCS guidance suggests it should be used, where there is diagnostic doubt, to aid the selection of patients for surgery and to monitor the success of surgery[9]. Map of medicine also suggests considering electrodiagnostic testing when the diagnosis is uncertain.[2]
6	**Ethics**
6.1	The CCG considers that the surgical release of the carpal tunnel meets the criterion for ethical healthcare delivery.
7	**Affordability**
7.1	The CCG does not call into question the affordability of surgical carpal tunnel release and therefore this policy does not rely on the Principle of Affordability.
8	**Policy**
8.1	The CCG will commission surgical release of the carpal tunnel if all the following criteria are met: • The patient is not pregnant, or is at least 12 weeks post-partum. • The patient's symptoms have not resolved despite 3 months of conservative treatment, including activity modification, wrist splinting

	and, if appropriate, steroid injection. • The patient has sleep disturbance and/or limited ability to undertake activities of daily living due to symptom severity. • In the case of diagnostic doubt, the diagnosis of carpal tunnel syndrome has been confirmed by nerve conduction studies. • The documented specialist opinion is that the likely benefit from surgery outweighs the risk of harm for the patient.
8.2	The CCG recognises that the type of surgical procedure undertaken (endoscopic or open surgery) will depend both on clinical factors (including the presence of swelling over the carpal tunnel) and the experience of the surgeon.
8.3	In severe progressive carpal tunnel syndrome, the CCG will commission surgical release of carpal tunnel syndrome if the documented specialist opinion is that surgery is needed promptly to prevent irreversible median nerve/muscle damage.
9	**Exceptions**
9.1	The CCG will consider exceptions to this policy in accordance with the Policy for Considering Applications for Exceptionality to Commissioning Policies. This policy is based on criteria of appropriateness, effectiveness, cost effectiveness and ethical issues. A successful request to be regarded as an exception is likely to be based on evidence that the patient differs from the usual group of patients to which the policy applies, and this difference substantially changes the application of those criteria for this patient. Requests for funding for surgical carpal tunnel release under exceptional circumstances may be submitted to the CCG's Individual Funding Request Panel.
10	**Force**
10.1	This policy remains in force until it is superseded by a revised policy.
11	**References**
	1. Verdugo RJ, Salinas RA, Castillo JL, Cea JG. Surgical versus non-surgical treatment for carpal tunnel syndrome. Cochrane Database of Systematic Reviews 2008, Issue 4. 2. Map of Medicine. Carpal Tunnel Syndrome (CTS) accessed July 2016. Pub 16th January – valid until 28th February 2019. http://app.mapofmedicine.com/mom/1/page.html?department-id=8&specialty-id=1037&pathway-id=3411&page-id=8741&history=clear 3. American Academy of Orthopaedic Surgeons (AAOS). Clinical practice

guideline on the treatment of carpal tunnel syndrome. Rosemont (IL): American Academy of Orthopaedic Surgeons (AAOS); 2008 Sep.

4. Shi Q, MacDermid JC. (2011) Is surgical intervention more effective than non surgical treatment for carpal tunnel syndrome? A Systematic Review. J Orthop Surg Res 2011 *April 11*. https://josr-online.biomedcentral.com/articles/10.1186/1749-799X-6-17

5. Marshall SC, Tardiff G, Ashworth NL. (2007) Local corticosteroid injection is effective in the short-term for the treatment of carpal tunnel syndrome. Cochrane Database of Systematic reviews 2007, Issue 2. http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD001554.pub2/full

6. Gerrittsen AA *et al*. (2002) Splinting vs surgery in the treatment of carpal tunnel syndrome: a randomized controlled trail. JAMA 2002;288:1245-51

7. Page MJ *et al*. Splinting for carpal tunnel syndrome (2012) http://www.cochrane.org/CD010003/splinting-for-carpal-tunnel-syndrome

8. Middleton SD & Anakwe RE, Carpal Tunnel Syndrome: Clinical Review. BMJ 2014;349:g6437 doi:10.1136/bmj.g6437 (Published 6 November 2014)

9. British Society for Surgery of the Hand (BSSH), British Orthopaedic Association (BOA), Royal College of Surgeons of England (RCSEng) (2013) Commissioning |Guide: Treatment of Tingling Fingers. https://www.rcseng.ac.uk/healthcare-bodies/docs/Treatmentofpainfultinglingfingers.pdf

Date of adoption
Date for review