



Clinical guideline to standardise the management of Tennis Elbow

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Type of document	Guidance
Target audience	Physical Health Physiotherapists
Document purpose	To standardise the assessment and treatment of tennis elbow in line with current evidence

Approving meeting	West Locality Governance and Risk Meeting	Date 8-Sep-14
Implementation date	Sep-14	

CWP documents to be read in conjunction with	
CP3 MH13	Health records policy Part IV and IVA - Mental Health Act 1983 - Consent to treatment

Document change history	
What is different?	New Document
Appendices / electronic forms	New Document
What is the impact of change?	New Document

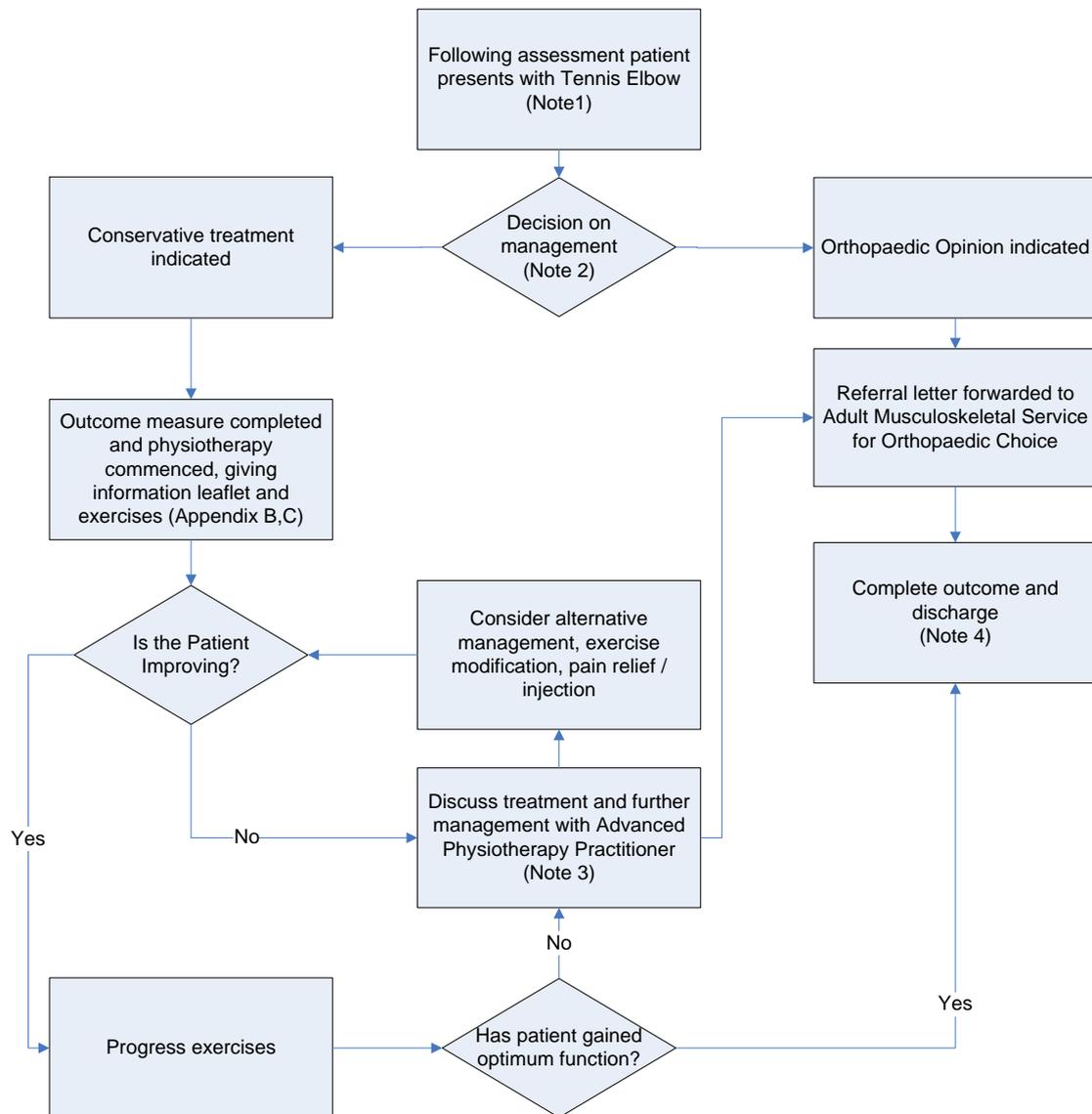
To view the documents Equality Impact Assessment (EIA) and see who the document was consulted with during the review please [click here](#)

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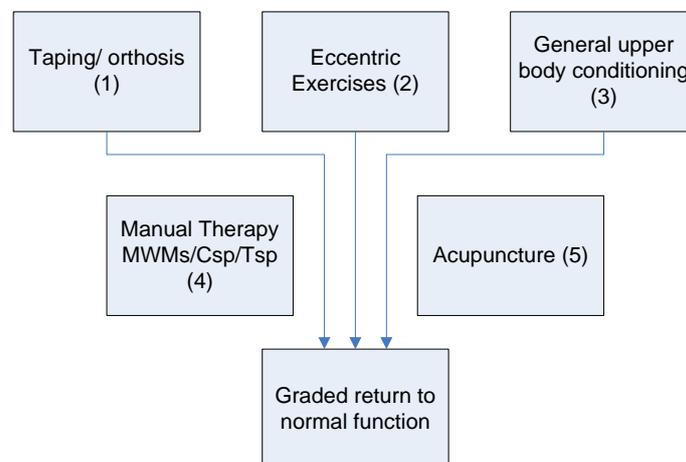
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Quick Reference Flowchart for treatment pathway for the management of Tennis elbow

For quick reference the guide below is a summary of actions required.



Conservative management



1. Introduction

Tennis elbow (also known as lateral epicondylitis / epicondylalgia) occurs as a result of repetitive strain and trauma on the attachment of the wrist extensors at the lateral epicondyle. This is felt as tenderness or pain over the lateral epicondyle which may radiate into the forearm muscles. This area is usually tender to touch and aggravated by movements which extend the wrist such as lifting, gripping, computer use or playing tennis.

The incidence of tennis elbow is 1-3% in the adult population, although it can be as high as 15% in manual workers (Coombs et al, 2009). It accounts for 4-7 consultations in General Practice per 1000 in the UK (Map of Medicine). A large proportion of patients improve over time; with eighty nine per cent expected to recover spontaneously within one year (Smidt et al., 2006). Despite this, the condition impacts substantially on the economy and health care systems, with between 10-30% of individuals with tennis elbow taking leave of absence for an average of 12 weeks (Jones, 2009). Therefore effective management of this patient group will help to reduce economic and health care costs.

Patients with lateral elbow pain are frequently referred to Physiotherapy Musculoskeletal Services by their GP, Consultant or via the Adult Musculoskeletal and Management Service.

Accurate assessment and diagnosis of tennis elbow is essential in establishing its effective management. The aim of this guideline is to provide a consistent approach to the assessment, diagnosis and management of tennis elbow, which is supported throughout by evidenced based practice, to improve the quality of patient care. The aims of the guideline are:

- To establish a consistent approach to the clinical assessment of tennis elbow;
- To provide a more accurate diagnosis of tennis elbow;
- To enable the clinician to provide the most appropriate management of the condition;
- To improve clinical outcomes;
- To contribute to Standards for better health D2d: Patients receive effective treatment and care, delivered by health care professionals who make clinical decisions based on the evidence- based practice (DoH2004);
- To contribute to Standards for better health C5d: Clinicians participate in regular clinical audit and reviews id services (DoH2004).

2. Definitions

Term	Definition
Lateral epicondyle	Bony prominence on the outer aspect of the elbow
Epicondylalgia	Pain in an epicondyle of the humerus or in the tendons or muscles that originate there
Epicondylitis	Painful inflammation of the muscles and soft tissues around an epicondyle
Wrist extensors	Muscles which bend the wrist and fingers back
Lateral (elbow)	On the outside (of the elbow)
Nerve Conduction Studies (NCS)	Is a type of investigation used commonly to evaluate the function, especially the ability of the electrical conduction of nerves.

3. Procedure

No.	Action	Rationale
1	Perform a full subjective and objective assessment on the patient (see Note 1).	<ul style="list-style-type: none">- To obtain a correct diagnosis of tennis elbow.- To exclude other causes of lateral elbow pain.
2	Refer for an Orthopaedic Opinion if assessment indicates that further investigations are required or the patient is not appropriate for Physiotherapy (see Quick Reference Flowchart - Note 2).	<ul style="list-style-type: none">- If diagnosis is uncertain an x-ray, ultrasound scan or MRI scan may be required. Nerve Conduction Studies may be required if a nerve entrapment is suspected.

No.	Action	Rationale
3	Explain treatment plan to patient and obtain informed consent for treatment (see Quick Reference Flowchart - Note 3).	<ul style="list-style-type: none"> - To ensure patient understanding and aiding compliance with treatment - To comply with the consent to examination and treatment policy.
4	Patients who are appropriate for conservative management should complete initial outcome measure (see Quick Reference Flowchart - Note 4).	<ul style="list-style-type: none"> - To establish a baseline measurement. - To quantify effectiveness of treatment in the long term. - To follow future audit to measure the effectiveness of the guideline.
5	Provide patient with an information leaflet about their condition.	<ul style="list-style-type: none"> - To provide information to aid informed consent to treatment.
6.	Commence conservative management .	<ul style="list-style-type: none"> - To ensure treatment is of good quality and evidenced based. - To ensure that treatment is standardised across the trust - To ensure effective progression of treatment.
7.	If patient is better, discharge with advice.	<ul style="list-style-type: none"> - To ensure patients improvement is maintained.
8.	If patient has not reached functional potential, discuss the patient with a Senior Physiotherapist or Advanced Upper Limb Practitioner (see Quick Reference Flowchart - Note 5).	<ul style="list-style-type: none"> - To ensure diagnosis is correct. - To ensure all treatment options have been explored. - To discuss further management options, e.g. further investigations, orthopaedic opinion.

4. Notes to accompany physiotherapy rehabilitation pathway for Tennis elbow

Current literature supports non-operative management as the first line intervention for tennis elbow (Bissett, 2006). An estimated 90-95% of patients are expected to respond to non-operative management (Coombes, 2008). It is believed that 89% of subjects will resolve spontaneously within one year, but physiotherapy has been associated with a superior outcome to the “wait and see” approach (Bissett, 2006, Smidt, 2002). Consequently it is appropriate to trial a course of physiotherapy for subjects seeking help for tennis elbow.

Note 1

Subjective signs of tennis elbow may include pain over the lateral aspect of the elbow which may radiate into the forearm. This may be aggravated by activities such as gripping and lifting. Patients may also describe a weakness in grip due to pain.

Objective signs may include

- Pain associated with resisted wrist extension with the elbow extended;
- Pain associated with resisted middle finger extension with the elbow extended;
- Pain on wrist flexion with the elbow extended;
- Weakened grip.

Consider differential diagnosis (Map of Medicine):

- Humeral fracture;
- Radial head fracture;
- Arthritis;
- Osteochondritis dissecans of the capitulum;
- Lateral elbow instability;
- Fibromyalgia;
- Radial tunnel syndrome;
- Cervical radiculopathy;
- Olecranon bursitis;
- Rotatory instability of the elbow;
- Posterior pinch or plica of the elbow.

Note 2

The duration, severity and onset of the patient's symptoms should be considered. Surgical intervention is recommended for refractory tennis elbow, described as 6-12 months of inadequate, non-surgical management (Map of Medicine).

If the diagnosis is uncertain, further investigations maybe required. This may include an x-ray, ultrasound or MRI scan. Nerve conduction studies may be warranted if a nerve entrapment is suspected, particularly in the presence of a neurological deficit.

Other factors which may influence the management decision are the functional needs of the patient, co-morbidities which may influence anaesthetic, surgery and healing.

Note 3

A decision on management of the condition is made following a discussion with the patient. This will include informing the patient of the expected prognosis of the condition and its self-limiting nature. The condition is believed to improve over time; with an estimated eighty nine per cent of patients expected to recover spontaneously within one year (Smidt et al, 2006).

Note 4

Weakness in grip strength is a classical feature of tennis elbow. Pain Free Grip Strength (PFGS) has been defined as the amount of force the patient is able to generate performing an isometric gripping action before eliciting pain (Stratford, 1993). This requires the use of a grip dynamometer. PFGS produces a valid measure of change over time (Stratford, 1993) with a strong correlation with improvements in function.

Note 5

If the patient is not improving with the existing management programme then a review of treatment with a Senior Physiotherapist or Advanced Upper Limb Practitioner is recommended.

If pain is the limiting factor then a review of analgesia or a therapeutic injection can be considered. Liaison with the GP regarding analgesia is recommended. A cortisone injection may be considered for short term pain relief for refractory tennis elbow (Map of Medicine) but should be used on a limited basis. Injections for the treatment of tennis elbow have been associated with a high recurrence rate of symptoms (Bissett, 2006).