Referral Guidelines for Possible Neurological Symptoms
East Kent Hospitals
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**INTRODUCTION**

The demand for appointments in Neurology Outpatients is very high. It is essential that waiting times are kept to a minimum to ensure patients with serious neurological illnesses receive timely assessment and management. Patients with some conditions may be better served by other specialities or be adequately managed in primary care. For these reasons we have developed the referral criteria set out in this document.

**WHAT HAPPENS TO PRIMARY CARE NEUROLOGY REFERRALS?**

This document contains guidelines for the referral of patient to outpatient neurology clinics in East Kent secondary care. It is important to be aware that these are guidelines and as such are not completely comprehensive. Where there is doubt cases should be discussed with a member of the neurology team.

This document contains some clinical directions. These are largely directly taken from other sources, particularly NICE guidelines. This document is not intended as a definitive or comprehensive guide to neurology in primary care and it is the responsibility of the practitioner to refer to appropriate original material and to take advice as necessary.

The material on headache is largely derived from the document Headaches Diagnosis and Management of Headaches in Young People and Adults, Clinical Guideline 150 Methods, Evidence and Recommendations, September 2012. This document is not reproduced in its entirety and, in particular, notes on the use of drugs including their licensed indications are not included. The reader should consult the original document as appropriate.
**We can only accept referrals:**

- **Patient aged 16 years or above**  
  - younger patients are normally dealt with by the paediatricians with referral to paediatric neurologists as appropriate

- **Patients referred by a medical doctor**  
  - e.g. not from physiotherapists, practice managers

**HCOOP consultants** often have particular skills in assessing elderly patients with neurological problems especially those due to vascular and neurodegenerative disease. Referral to HCOOP may be appropriate.

**Under no circumstances use the referral pathway for acute emergencies** e.g. sudden onset headache, sudden paralysis, very frequent seizures, suspected meningitis or subarachnoid haemorrhage.

**Non-acute headache**

In order for a referral to be accepted, the following investigations must have been performed/requested:

- MRI or CT brain
- FBC
- ESR
- U&E
- TFT

**Suspected stroke or TIA should be referred urgently through stroke pathway**
<table>
<thead>
<tr>
<th><strong>Back Pain Without Neurological Signs</strong></th>
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<tbody>
<tr>
<td>We do not routinely see patient in this category.</td>
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<tr>
<th><strong>Children Under 16 Years of Age</strong></th>
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<tr>
<td>We do not see patient in this category.</td>
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<tr>
<th><strong>Dementia &amp; Cognitive Impairment</strong></th>
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<tr>
<td>More elderly patients with suspected dementia are generally most appropriately referred to a Memory Clinic.</td>
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<tr>
<th><strong>Definite Epilepsy</strong></th>
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<tr>
<td>Patients with an intercurrent illness or more than one fit or a prolonged fit on presentation: Refer to Acute Medical Team on call. All other patients: Refer Neurology. Distinguish between generalised tonic-clonic seizures and focal seizures with details of the aura, the ictus and the postictal period including any evidence of postictal confusion.</td>
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<thead>
<tr>
<th><strong>Loss of Consciousness or Uncertain Origin</strong></th>
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<tr>
<td>Detail the evidence of syncope or epilepsy and refer on the basis of probability. Document seizure markers:</td>
</tr>
<tr>
<td>• unconsciousness for more than 5 minutes</td>
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<tr>
<td>• amnesia greater than 5 minutes</td>
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<tr>
<td>• injury</td>
</tr>
<tr>
<td>• tongue biting</td>
</tr>
<tr>
<td>• incontinence</td>
</tr>
<tr>
<td>• conscious with confused behaviour</td>
</tr>
<tr>
<td>• post attack headache</td>
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</table>

**Inform patients with attacks of loss of consciousness of uncertain origin they must stop driving and inform the DVLA, pending clarification of the diagnosis.**
ENTRAPMENT NEUROPATHY

Common entrapment neuropathies are:

- carpal tunnel syndrome (median nerve)
- ulnar neuropathy (ulnar nerve)
- lateral cutaneous nerve of the thigh (meralgia paraesthetica)

Ensure had investigations:

- FBC (macrocytosis – alcohol and B12 deficiency)
- B12
- U&E
- LFT (alcohol)
- TFT especially in carpal tunnel syndrome

Nerve conduction studies may be helpful.

CARPAL TUNNEL SYNDROME

The East Kent Carpal tunnel Syndrome Care Pathway allows a general practitioner who suspects CTS to refer directly to Neurophysiology in Canterbury where tests can be performed and a plan for treatment made in one visit. Much of the treatment is then carried out in primary care. Please see http://www.carpal-tunnel.net/kentinfo/pathway. Steroid injections should not be given unless the diagnosis has been confirmed with nerve conduction studies.

ULNAR NEUROPATHY

If ulnar nerve at elbow is affected avoid pressure and avoid bending elbow. Nerve conduction studies should be requested directly from Neurophysiology, Kent & Canterbury Hospital. Orthopaedic referral if necessary.

MERALGIA PARAESTHETICA

Pain on the outer side of the thigh, occasionally extending to the outer side of the knee, usually constant; burning sensation, tingling, or numbness in the same area. No other neurological symptoms or signs. Neurological referral not indicated. Nerve conduction studies are not indicated. Very rarely underlying structure cause e.g. inguinal mass.

FATIGUE SYNDROMES

In the absence of definite neurological symptoms or signs, fatigue rarely has a neurological basis. Consider malignancy, infection, autoimmune disease, endocrine or haematological disease and if appropriate: refer General Medicine.

HEADACHES

PRIMARY VS. SECONDARY HEADACHES
Secondary headaches are due to an underlying disorder e.g. brain tumour, temporal arteritis.

Primary headaches are headache syndromes with no associated disorder, e.g. migraine, tension headache.

**Urgent Secondary Headaches**

Altered sensorium, suspected meningitis, encephalitis or other infection, papilloedema, suspected sub-arachnoid haemorrhage (consider in any sudden-onset headache) or suspected temporal arteritis is urgent: Refer to Acute Medical Team on call.

Headaches with other neurological phenomena such as disturbance of cognition, visual field defects, motor function, vomiting or poor balance or features of raised ICP should be regarded as urgent. The urgency will depend on the accompanying neurological phenomena and the duration of the history: **Refer Neurology or Acute Medical Team on call.**

Headache with history of cancer elsewhere or HIV infection: **urgent referral to neurology**

Angle closure glaucoma should be considered for headache associated with a red eye, halos or unilateral visual symptoms. Acute angle closure glaucoma is an ophthalmological emergency.

The risk of brain tumour in a headache presentation in primary care is extremely low at 0.09%. If the GP can make a diagnosis of a primary headache at presentation (migraine, tension type or cluster) the risk of tumour is 0.045%. If a primary headache diagnosis cannot be made, the risk is 0.15%.

**Non-acute Headache: When to request Brain Imaging (not exhaustive)**

Refer for CT or MRI:
- cough headaches, postural headaches, on neck extension, headaches with nausea
- headaches in sleep or in early morning
- any suspicion of a secondary headache
- do not refer people diagnosed with tension-type headache, migraine, cluster headache or medication overuse headache for neuroimaging solely for reassurance
- discuss the need for neuroimaging for people with a first bout of cluster headache with a GP with a special interest in headache or a neurologist
- if referring a headache patient to neurology CT or MRI brain should be requested simultaneously if not already carried out

**Headache: Neurological Referral**

For the following symptoms, consider ROUTINE outpatient referral to neurologist:
- new onset cluster headache
- new headache where a diagnostic pattern has not emerged after eight weeks from presentation.
- headache aggravated by exertion, cough, sneeze or Valsalva manoeuvre
- headaches that have been present for some time but have changed significantly, particularly a rapid increase in frequency
- new headache in a patient over 50 (but see giant cell arteritis below)
- headaches that wake from sleep

In order for a referral to be accepted, the following investigations must have been performed/requested:
- MRI or CT brain
- FBC
- ESR
- U&E
- LFT

**Primary Headache: Management in Primary Care**

**NICE 2012:** “Most common headache types can be diagnosed on clinical history and can be managed in primary care.”

In long standing headaches in adults without neurological signs or features of raised ICP, diagnose tension-type headache, migraine and cluster headache according to the features in the table below.

<table>
<thead>
<tr>
<th>Headache feature</th>
<th>Tension-type headache</th>
<th>Migraine (with or without aura)</th>
<th>Cluster headache</th>
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</thead>
<tbody>
<tr>
<td><strong>Pain location</strong></td>
<td></td>
<td></td>
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<tr>
<td>Bilateral</td>
<td>Unilateral or bilateral</td>
<td>Unilateral (around the eye, and along the eye and along the side of the head/face)</td>
<td></td>
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<tr>
<td><strong>Pain quality</strong></td>
<td></td>
<td></td>
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<tr>
<td>Pressing/tightening (non-pulsating)</td>
<td>Pulsating (throbbing or banging in young people aged 12 to 17 years)</td>
<td>Variable (can be sharp, boring, burning, throbbing or tightening)</td>
<td></td>
</tr>
<tr>
<td><strong>Pain intensity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mild or moderate</td>
<td>Moderate or severe</td>
<td>Severe or very severe</td>
<td></td>
</tr>
<tr>
<td><strong>Effect on activities</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Not aggravated by routine activities of daily living</td>
<td>Aggravated by, or causes avoidance of, routine activities of daily living</td>
<td>Restlessness or agitation</td>
<td></td>
</tr>
<tr>
<td><strong>Other symptoms</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>None</td>
<td>Unusual sensitivity to light and/or sound or nausea and/or vomiting</td>
<td>On the same side as the headache: - red and/or watery eye - nasal congestion and/or runny nose - swollen eyelid - forehead and facial sweating - constricted pupil and/or drooping eyelid</td>
<td></td>
</tr>
<tr>
<td><strong>Aura</strong></td>
<td>Active symptoms can occur with or without headache: - are fully reversible - develop over at least 5 minutes - last 5-60 minutes</td>
<td>- Flickering lights, spots or lines and/or partial loss of vision; - Sensory symptoms such as numbness and/or pins and needles; and/or speech disturbance</td>
<td></td>
</tr>
<tr>
<td><strong>Typical aura symptoms include:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Duration of headache</strong></td>
<td>30 minutes–continuous</td>
<td>4–72 hours in adults 1–72 hours in young people aged 12-17 years</td>
<td>15–180 minutes</td>
</tr>
<tr>
<td><strong>Frequency of headache</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>&lt; 15 days per month</td>
<td>≥ 15 days per month for more than 3 months</td>
<td>≥ 15 days per month for more than 3 months</td>
<td>≥ 15 days per month for more than 3 months</td>
</tr>
<tr>
<td><strong>Diagnosis</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Episodic tension type headache</td>
<td>Chronic type tension headache</td>
<td>Episodic migraine (with or without aura)</td>
<td>Chronic migraine (with or without aura)</td>
</tr>
<tr>
<td>Chronic tension type headache</td>
<td>Episodic cluster headache</td>
<td>Episodic cluster headache</td>
<td>Chronic cluster headache</td>
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*a Headache pain can be felt in the head, face or neck. b See recommendations 1.2.2, 1.2.3 and 1.2.4 for further information on diagnosis of migraine with aura. c The frequency of recurrent headaches during a cluster headache bout. d The pain-free period between cluster headache bouts. e Chronic migraine and chronic tension-type headache commonly overlap. If there are any features of migraine diagnose chronic migraine. f NICE has developed technology appraisal guidance on Botulinum toxin type A for the prevention of headaches in adults with chronic migraine (headaches on at least 15 days per month of which at least 8 days are with migraine).*
Consider the following points.

- History, particularly the time course (consider using headache diaries).
- Examination should include visual acuity, fields, funduscopy and blood pressure.
- Giant cell arteritis should be considered in any patient over the age of 50 presenting with a new headache or change in headache. Check ESR /CRP.
- Consider the diagnosis of Medication Overuse Headache. Determine whether the patient has been taking simple analgesics (prescribed and/or OTC) on 15 or more days a month, or codeine-containing analgesics, ergot or triptans on 10 or more days a month. If so, these drugs should be stopped abruptly (temporarily exacerbating headache) and the headache re-assessed 4 weeks later.
- If there is evidence of depression this should be treated; headaches may improve with adequate treatment.

In all chronic headaches give appropriate lifestyle advice: Good sleep hygiene; Avoidance of trigger factors such as dehydration, skipping meals, coffee, cheese, chocolate, alcohol; Advise to undertake moderate exercise; Avoid stress. Give patient leaflet on relaxation techniques. (References: British Association for the Study of Headaches (BASH) Guidelines / SIGN Headache Guidelines / WSHT 2WR Proforma / NICE-BITES--October-2012-No-46-Diagnosis-and-management-of-headaches).

**MEDICATION OVERUSE HEADACHE**

Be alert to the possibility of medication overuse headache in people whose headache developed or worsened while they were taking the following drugs for 3 months or more: triptans, opioids, ergots or combination analgesic medications on 10 days per month or more or paracetamol, aspirin or an NSAID, either alone or any combination, on 15 days per month or more.

**MANAGEMENT: ALL HEADACHE DISORDERS**

Consider using a headache diary:

- to record the frequency, duration and severity of headaches
- to monitor the effectiveness of headache interventions
- as a basis for discussion with the person about their headache disorder and its impact.

Do not refer people diagnosed with tension-type headache, migraine, cluster headache or medication overuse headache for neuroimaging solely for reassurance.

Include the following in discussions with the person with a headache disorder: a positive diagnosis, including an explanation of the diagnosis and reassurance that other pathology has been excluded and the options for management and recognition that headache is a valid medical disorder that can have a significant impact on the person and their family or carers.

**MANAGEMENT SUMMARY: MIGRAINE WITH OR WITHOUT AURA ACUTE TREATMENT**

- Offer combination therapy with an oral triptan and an NSAID or an oral triptan and
paracetamol.

- Take into account the person's preference, comorbidities and risk of adverse events.
- For young people aged 12–17 years consider a nasal triptan in preference to an oral triptan.
- For people in whom oral preparations (or nasal preparations in young people aged 12–17 years) for the acute treatment of migraine are ineffective or not tolerated: offer a non-oral preparation of metoclopramide, or prochlorperazine and consider adding a non-oral NSAID or triptan if these have not been tried.

**Management Summary: Migraine with or without aura prophylactic treatment**

- Offer topiramate or propranolol according to the person’s preference, comorbidities and risk of adverse events.
- Advise women and girls of childbearing potential that topiramate is associated with a risk of foetal malformations and can impair the effectiveness of hormonal contraceptives. Ensure they are offered suitable contraception.

**Management Summary: Cluster headache acute treatment**

- Offer oxygen and/or a subcutaneous or nasal triptan for the acute treatment of cluster headache.
- When using oxygen for the acute treatment of cluster headache: use 100% oxygen at a flow rate of at least 12 litres per minute with a non-rebreathing mask and a reservoir bag and arrange provision of home and ambulatory oxygen.
- When using a subcutaneous or nasal triptan, ensure the person is offered an adequate supply of triptans calculated according to their history of cluster bouts, based on the manufacturer’s maximum daily dose.

**Neck pain**

We do not routinely see patient in this category.

**Parkinson’s Disease**

More elderly patients with Parkinson’s or suspected Parkinson’s are usually most appropriately referred to HCOOP.

**Progressive pure motor or oculomotor syndromes, without sensory symptoms**

This may represent motor neurone disease, muscle disease or myasthenia and require specialist investigation. Unless urgent, these cases may best be referred to neurology or a specialist neurological HCOOP clinic.

Acute or subacute: Refer on-call HCOOP or acute medical team on-call (consider...
discussing with neurologist on telephone)

Sub-acute or chronic: **Refer neurology or specialist neuro-HCOOP clinic.**

<table>
<thead>
<tr>
<th><strong>SCIATICA</strong></th>
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| If there is bladder involvement this is urgent: **refer to orthopaedic team on call**  
Weak legs: **see Weak Limbs.**  
Night pain: consider malignancy: **consider urgent imaging and appropriate referral.**  
Classic Sciatica: **refer to orthopaedics.** |

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<tr>
<th><strong>SYNCOPE AND PRESYNCOPE</strong></th>
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| Syncope is loss of consciousness due to a sudden fall in blood pressure.  
Simple syncope (vasovagal syncope, fainting) is usually precipitated by pain, emotional shock, rising suddenly or micturition.  
Syncopal symptoms include:  
  - light-headedness,  
  - pallor  
  - hearing loss or distant hearing  
  - darkening of the vision or narrowing of the vision  
Some jerking of limbs may occur. Recovery is quick. Patients may flush on recovery.  
A secondary care referral is not required unless simple syncope is recurrent and frequent.  
Cardiogenic syncope is often sudden or exercise induced: Refer to Cardiology |

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<tr>
<th><strong>THE DIZZY PATIENT</strong></th>
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| “Dizziness” includes:  
  - presyncope (**refer cardiology** see Syncope)  
  - uncomplicated vertigo with no other neurological symptoms or signs (**refer ENT**, see Vertigo)  
  - vertigo with neurological symptoms or signs (**refer to neurology**; see Vertigo)  
  - fatigue syndromes (**refer General Medicine**; see Fatigue Syndromes) |

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<tr>
<th><strong>TRANSIENT ISCHAEMIC ATTACKS AND STROKE</strong></th>
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<tr>
<td><strong>Refer to Stroke service or Acute Medical Team on-call</strong></td>
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<tr>
<th><strong>VERTIGO</strong></th>
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| Rotation vertigo, the sensation of spinning, may be:  
  - horizontal (“like on a roundabout”) |
• vertical ("scrolling", "loss of the vertical hold" - older patients who remember old TVs)
• roll-plane ("like a washing machine")

Vertical vertigo is always neurological, roll-plane vertigo is usually neurological and horizontal vertigo is usually peripheral unless there are other neurological symptoms or signs.

Uncomplicated vertigo, a sensation of being on a ship or with horizontal rotation in the absence of any other neurological symptoms or signs is usually of peripheral origin: Refer ENT

Vertigo in the vertical plane or in the roll-plane, vertigo associated with other neurological symptoms or signs or in association with neck extension may have a neurological basis. Detail the neurological features: refer to neurology.

**Weak Limbs**

Patient with acute or sub-acute deterioration in the strength of the limbs: refer to acute medical team on call.

For patients with slowly evolving weakness of the limbs, attempts should be made to ascertain whether the likely cause is central with increased tone, brisk reflexes and extensor plantars or peripheral with reduced reflexes. If there are no significant sensory symptoms, myasthenia, motor neurone disease and muscle disease should also be considered: refer urgently to neurology.