Most headaches are self-limiting. Many can be managed conservatively and given time to resolve of their own accord.

Referrals must include:
1) MRI compatibility questionnaire
2) Valid Contact Telephone Number
3) Recent U+E (or take one which we can look up)
**Secondary Headaches**

The following headaches would be considered as urgent cases and should be referred as below:

<table>
<thead>
<tr>
<th>Presentation</th>
<th>Action</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thunderclap Headache</td>
<td>Refer to A+E</td>
<td>Emergency</td>
</tr>
<tr>
<td>Acute onset Headache with altered level of consciousness</td>
<td>Refer to A+E</td>
<td>Emergency</td>
</tr>
<tr>
<td>Suspected Meningitis/Encephalitis</td>
<td>Refer to A+E (NB - IM penicillin)</td>
<td>Emergency</td>
</tr>
<tr>
<td>Headache with definite papilloedema</td>
<td>Refer to Virtual Clinic</td>
<td>Urgent OP Imaging</td>
</tr>
<tr>
<td>New Onset Headache with a known history of cancer or HIV infection</td>
<td>Refer to Virtual Clinic</td>
<td>Urgent OP Imaging</td>
</tr>
<tr>
<td>New Onset Headache without fever AND progressive focal deficit eg visual loss, speech loss or weakness</td>
<td>Refer to Virtual Clinic</td>
<td>Urgent OP Imaging</td>
</tr>
<tr>
<td>Suspected Temporal Arteritis May have 2 or more of &gt;50yrs, ESR &gt;50mm, constitutional symptoms, jaw claudication, amaurosis fugax, scalp tenderness, tender temporal artery</td>
<td>Refer to Neurology OPC: start Prednisolone 40mg daily</td>
<td>Seen at next available Neurology Clinic</td>
</tr>
</tbody>
</table>

All other headache referrals should be made using the link on the pathways4gps.org.uk website.
Waiting Times in SHSCT Neurology

Routine waiting times are 9 weeks for imaging studies or out-patient appointment. Urgent out-patients are 1-2 weeks, and 2-4 weeks for urgent out-patient imaging.
Headache Overview

Headache is the most common reason for referring to neurology - 29% of all primary care referrals to us in last 4 years. With the introduction of a “Virtual Clinic” approach to triage, about 20% of triaged cases are offered written advice only, 55% are offered brain imaging and 25% attend out-patients. About 15% of those imaged will end up attending out-patients because of imaging findings or the nature or severity of the presenting headache eg exertional/coital headache.

The Common Headaches
Apart from emergency situations e.g. thunderclap headache, or suspected meningitis the majority of headaches presenting for medical advice are Migraine (including Chronic Migraine) or Cervicogenic Headache. There is an extremely low probability of an underlying serious cause in these cases.

People with chronic daily headache are the most common group attending neurology out-patients with headache. People who have headaches almost every day and who have ever had migrainous features to their headaches usually have a condition called Chronic Migraine.

You should feel confident to recognise and initiate management of Migraine (including Chronic Migraine) and Cervicogenic Headache.

Imaging is only ESSENTIAL for headache associated with:
1. New neurological deficit eg limb weakness, cranial nerve palsy, personality change
2. New onset seizure
3. Features suggestive of ↑ICP ie progressive headache, posture related headache, vomiting, drowsiness
4. Papilloedema

Early morning headache is not a discriminating feature for ↑ICP, it is commonly described in Cervicogenic headache, due to poor sleeping posture or too soft a pillow.
People who cannot be reassured regarding underlying structural disease should be discussed using the Virtual Clinic – as MRI / CT scanning can be arranged (recent U+E and MRI compatibility required). This is better than using direct access CT Brain as neurology can advise on incidental findings.

People who do not have a diagnosis after 8 weeks of primary care follow-up could be discussed with neurology using Virtual Clinic.

NICE did not recommend scanning for reassurance, due to a lack of high quality evidence, although studies exist that demonstrate benefit in the short to medium term. It is still common practice to scan for reassurance, as a fixed belief about an underlying cause is a barrier to managing chronic pain or anxiety. The imaging rate for cases referred to SHSCT Neurology for Headache is about 50% of all cases.

The threshold for imaging is lower in the over 50s due to the increased risk of structural disease.
### Clinical Features of the Common Headaches

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Clinical Features</th>
</tr>
</thead>
</table>
| **Migraine**         | 6% of men, 16% of women per annum  
Episodes of Moderate-Severe Disabling Headache  
Pain free between  
Pulsing or throbbing quality, but some people just say it is ‘sharp’  
Sensory Sensitivity Present i.e. one or more of  
1. Nausea or Vomiting  
2. Intolerance of light / prefer dark  
3. Intolerance of noise / prefer quiet  
4. Intolerance of smell / anorexia  
5. Intolerance of movement / prefer to lie  
6. Intolerance of contact / prefer to be alone  
About 10-15% will also have migraine aura |
| **Chronic Migraine** | 0.1-0.2% of adults  
(2% of people with migraine each year get a phase of chronic migraine)  
Bouts of moderate-severe migraine which never seem to resolve.  
Background daily ache or pressure – “head never clear”  
Can have intolerance of light, noise, movement without severe headache periods  
Overuse of analgesic medication or triptans and OOH attendances  
Psychosocial stressors.  
Co-morbid anxiety and/or depression |
| **Cervicogenic Headache** | 4% of adults per annum  
Periods of constant – non-pulsatile pain, lasting days to weeks:  
Often Unilateral, and locked to one side  
Can be back of head, top of head - and sound just like TTH  
Will radiate to forehead, temple, ear  
Often worse after lying / driving  
Tenderness cranio cervical junction, especially c1/2, c2/3 facet joints  
Often previous history of whiplash, head injury, occupation-related poor posture or osteoarthritis  
Limited range of neck rotation or flexion/extension  
Can have superimposed shorter episodes of sharp or shooting pain  
Physiotherapist can identify affected joints using Passive Accessory Intervertebral Movements (PAIVMs) |
| **Ice-pick Headache** | At least 1% (some estimates up to 35%!) per annum  
Brief neuralgiform headaches  
Maximal within a split second  
Last no more than a few seconds at high intensity but can leave a residual dull sensation for minutes afterwards.  
Often in the eye or above the eye.  
The intensity of pain will sometimes make people wince, feel weak at the knees or clutch their head.  
More common in people with migraine or cluster headaches and occur in people with cervicogenic headache. |
| **Episodic tension type headache** (includes temporary headache associated with a self-limiting fever) | Up to 80% of people per annum have a single episode of this, and usually do not consult Episodic Mild-Moderate Headache Pain free between Pressure/tightness/squeezing/heaviness Usually bilateral on top/front/sides of head Occasional mild nausea or mild intolerance of noise, but not to the same extent as for migraine NB- Can have a cervicogenic element - pain from facet joints can mimic ITH, and radiate to top or side of head, in which case physiotherapy may be an option |
| **Chronic Tension Type Headache** | 1% of adults each year Same as Episodic Tension Type Headache but occurs on a majority of days for more than 3 months Medication overuse, depressive disorders or psychosocial stressors Cervicogenic aetiology is probably worth exploring |
| **Cluster Headache** | 0.001% incidence Severe side-locked pain maximal within a minute or two, lasts 30-180 minutes, with agitation, eye-watering, ptosis, reddening of eye. Can have several attacks per day, and daily attacks for several weeks, then none for months. |
| **Trigeminal Neuralgia** | 0.001% incidence Brief, electric shock pains in trigeminal territory (mostly V2 and V3), triggered by touch or other sensory stimulus. Can have a dull background ache between severe shooting exacerbations |
Conservative Management of Headache

These 3 points should be considered in all patients, especially those with migraine or chronic migraine.

1. The Headache-Friendly-Lifestyle
The following lifestyle factors can be associated with an increased risk of severe headaches:
   1. poor sleep hygiene,
   2. dehydration,
   3. erratic eating habits and consequent hunger,
   4. psychosocial stress
   5. being overweight or obese (BMI >25)
   6. lack of exercise

These factors should be discussed, especially in people with migraine, episodic and chronic tension type headache. They are less applicable to cervicogenic headache.

The Headache-Friendly Lifestyle Patient Information Sheet should be given to all cases, especially those with migraine.

2. Medication over-use
Analgesics, particularly codeine, are a RISK FACTOR for the development of chronic daily headache, especially chronic migraine. Roughly 75% of people who withdraw medication in an attempt to treat chronic daily headache will either see a significant improvement in pain, or become sensitive to medication once more. Not everybody who withdraws medication becomes pain free, so you need to be careful when talking to patients, that they understand it is about reducing risk of pain, as if they remain in pain, you may lose their trust! Triptans can also cause overuse headache if taken more than 10 times per month. It is important to take a drug history, including OTCs, and avoid codeine-based or morphine-based preparations in headache management, especially migraine.
When patients with analgesic headaches stop their medication, it would be expected that they will have a worsening headache (rebound headache) for up to 2 weeks before significant improvement.

You have 3 options when stopping over-used medications:
1) No substitution medications
2) Naproxen 250mg tds for 14 days
3) Prednisolone 20mg daily for 7 days

Medication overuse is less of a problem with cervicogenic headache.

3. Physiotherapy
Patients with cervicogenic headache not controlled by anti-inflammatories could benefit from physiotherapy. About 40% of people with migraine also report neck-related symptoms, which may improve with physiotherapy. Migraine and cervicogenic headache can co-exist.

The proper assessment of neck involvement in headache requires a clinical sign called a Passive Accessory Intervertebral Movement (PAIVM). This tests the sensitivity of the upper cervical facet joints to sustained moderate manual pressure across the joint. In patients with cervicogenic headache it reliably identifies symptomatic joints, which are then suitable for upper cervical mobilisation (usually takes 8-10 treatment sessions), or a facet joint neurolysis procedure (as performed at the Pain Clinic). A crude marker, for non-physiotherapists, to detect neck-involvement in headache is reproduction of headache or asymmetric tenderness on palpating the C2 transverse processes (which sits infero-posterior to the tip of the mastoid process).

Not all physiotherapists are trained to elicit cervical PAIVMs, and this is an area in need of service development and education.

Acupuncture is offered by some physiotherapists and has evidence of efficacy in Tension-type headache, and can be an option if available.
Migraine (Episodic Migraine)

Episodic migraine should be managed within primary care in almost every case.

Conservative Management:
1. Lifestyle factors
2. Encourage patient to go to sleep if migraine of sufficient severity to warrant treatment.
3. Ask the patient to keep headache diary to monitor efficacy

Acute Treatments:
Therapeutic ladder for acute treatment

<table>
<thead>
<tr>
<th>Level</th>
<th>Recommended Treatments</th>
<th>Indication</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Line</td>
<td>Simple Analgesia</td>
<td>Any migraine headache of any severity</td>
</tr>
<tr>
<td></td>
<td>1. Soluble Aspirin 900mg chewed, buccal absorption OR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Ibuprofen 400-800mg OR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Paracetamol 1000mg</td>
<td></td>
</tr>
<tr>
<td>Second Line</td>
<td>NSAID OR Soluble Aspirin AND Anti-emetic</td>
<td>Migraine which failed to respond to First Line or associated with significant nausea or vomiting</td>
</tr>
<tr>
<td></td>
<td>1. Soluble Aspirin 900mg buccal AND Buccastem 3mg OR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Ibuprofen 400-800mg and Buccastem 3mg</td>
<td></td>
</tr>
<tr>
<td>Third Line</td>
<td>Triptans</td>
<td>(a) Migraine that causes cessation of daily activity</td>
</tr>
<tr>
<td></td>
<td>1. Sumatriptan 50mg -100mg oral</td>
<td>(b) Failure to respond to First or Second Line</td>
</tr>
<tr>
<td></td>
<td>2. Zolmitriptan Melts 2.5mg – 5mg</td>
<td>(c) NSAID or Aspirin Sensitivity</td>
</tr>
<tr>
<td></td>
<td>3. Sumatriptan 6mg SC</td>
<td></td>
</tr>
<tr>
<td>Fourth Line</td>
<td>Rectal Administration</td>
<td>House Call for Migraine not responding to third line</td>
</tr>
<tr>
<td></td>
<td>1. Domperidone 30mg PR AND Diclofenac 50mg to 100mg</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Diazepam 5mg to induce sleep</td>
<td></td>
</tr>
</tbody>
</table>

Practice Tip: About 40% of migraine headaches return within a few hours of use of Triptan. To reduce the risk of headache returning,
take Paracetamol 1g or Naproxen 250mg with Triptan drug and repeat every 6-8 hours for 24 hours.

Practice Tip:
Treatment of Rare, Severe Disabling Migraine Attack
1. Sumatriptan 100mg, repeat after 2 hours AND
2. Buccastem 3mg, repeat after 4 hours AND
3. Tolfenamic Acid 200mg, repeat after 6 hours AND
4. Consider Diazepam 5mg to induce sleep if still in pain after 4 hours

Migraine Prevention:
Indications for prophylactic medication are:
1. Migraines that significantly interfere with daily routine despite acute therapies
2. Frequent migraines (>2/ month)
3. Contra-indications, failure, adverse events or overuse of acute treatments
4. Uncommon migraines including hemiplegic migraine, basilar migraine, migraine with prolonged aura, previous migrainous infarction.

Treatment aims:
1. To decrease frequency, severity and duration of migraines (realistically, aim for 50% reduction)
2. To improve responsiveness of acute therapies

Therapeutic ladder for preventative treatment:

<table>
<thead>
<tr>
<th>Level</th>
<th>Drug</th>
<th>Suggested Dosing Schedule</th>
<th>Definition of Treatment Failure</th>
<th>Indication</th>
</tr>
</thead>
</table>
| 1st   | Propranolol | 40mg once daily, increase by 40mg every week till max tolerated or max 80mg tds Persevere with max tolerated for 12 weeks | Intolerance
No response to 80mg tds
No response after 12 weeks | Caution in Asthma |
Practice Tip
To improve tolerability of prophylaxis, build up dose slowly and persevere with maximum tolerated dose, rather than a fixed dose for every patient. Migraine prophylaxis probably works by reducing the sensitivity of the cerebral cortex to sensory stimuli, and it probably takes about 8 weeks for a drug to alter the responsiveness of the cerebral cortex. A common error is to stop prophylaxis too soon.

Treatment strategy
Trial of preventative medication for at least 3 months at therapeutic (ie maximum tolerated) dose
Continue for 6 months, then try to withdraw
If treatment failure, start second line medication
Discuss with Neurology if intolerant or unresponsive to all of the above medications at therapeutic doses.

Cases in which there is a diagnosis of migraine are suitable for email consultation. Chronic Migraine which fails to respond to medication withdrawal and 2 prophylactic medications should be referred to Neurology OPC, to review diagnosis, and determine if suitable for third line intervention like Botulinum Toxin injections.
**Chronic Migraine**

These people have a past history of migraine and have developed a constant daily background headache (which can sound like tension-type pain - pressure/weight / heaviness) but get superimposed severe migraine episodes at least a weekly on top of this.

Medication overuse is a major RISK FACTOR in the development of chronic migraine. Stopping overused-medication does not guarantee cessation of headache, but a majority (>50%) will get significant reduction in pain, and may regain responsiveness to anti-migraine medication.

Headache diaries are especially useful in quantifying the frequency of headache and amounts of medication consumed.

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifestyle Factors</td>
<td>Aggressive Lifestyle Adjustment can have a big impact on headache frequency and intensity</td>
</tr>
<tr>
<td>Psychosocial Stressors</td>
<td>Discuss significant stressors Manage co-existing depression and anxiety</td>
</tr>
<tr>
<td>Take drug history</td>
<td>Withdraw any analgesic or triptan used &gt;10 times per month Avoid codeine based or opiate drugs</td>
</tr>
<tr>
<td>Medication</td>
<td>Use simple analgesics and anti-emetics only for acute headaches Start a prophylactic drug as per migraine</td>
</tr>
<tr>
<td>Sleep Hygiene</td>
<td>Sleep Hygiene can reduce headache severity by about 30% in people who report chronic migraine.</td>
</tr>
</tbody>
</table>

Imaging can be performed if you are unable to reassure your patient that there is no serious problem, and is best referred to the Neurology In General Practice

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Virtual Clinic, with a completed MRI compatibility checklist and contact telephone number.

If no response to medication withdrawal AND prophylaxis consider referral for assessment.
Cervicogenic Headache

NB - These patients are usually in their 50s or older, or if younger have a past history of neck or head trauma, or an occupational posture that strains their neck. Trauma does not have to be severe.

Clinical examination can confirm neck involvement.

The pain is due to facet or atlanto-axial joint degeneration, or other soft tissue problem in upper spine - so simple analgesics or NSAIDS are first line treatments.

Initially use any NSAID at a therapeutic dose on a regular basis to alleviate pain. e.g. Diclofenac 50mg tds or Naproxen 250mg tds for 14 days

If there is no response to NSAIDS then consider a referral to physiotherapy for assessment of upper cervical joint mobility (PAIVMs) with view to treatment using upper cervical mobilisation.

Refer to Neurology if no response to NSAID and/or Physiotherapy or if concern regarding diagnosis. In older people an ESR should be checked as Cervicogenic Headache and Temporal Arteritis share common features - both can be relatively acute in onset, is severe and often unilateral.

Practice Point
Cervicogenic Headache is an under-recognised cause of headache, and is the most common diagnosis in patients with persistent or recurrent headache who lack migrainous features.
**Ice-pick Headaches**

Usually reassurance is all that is required if the history is typical. There are no randomised trials, but any of these could be used:

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indomethacin</td>
<td>25mgs three times daily</td>
</tr>
<tr>
<td>Celecoxib</td>
<td>100mgs daily</td>
</tr>
<tr>
<td>Gabapentin</td>
<td>300mg three times once daily, increasing by 300mg per week until maximum 600mg tds</td>
</tr>
</tbody>
</table>

**Episodic Tension-Type Headache**

This is usually a self-limiting complaint, and usually people do not seek medical advice for these ‘simple’ headache.

Management:

<table>
<thead>
<tr>
<th>Life-style factors</th>
<th>Acute Treatment</th>
<th>Prophylaxis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aspirin 900mg as required Paracetamol 1000mg as required</td>
<td>Amitriptyline 10mg once daily, increasing by 10mg every 2 weeks until max tolerated or max 150mg daily. Persevere with max tolerated for 8-12 weeks</td>
</tr>
<tr>
<td></td>
<td>Avoid codeine based analgesics due to risk of dependence and medication overuse headache</td>
<td></td>
</tr>
</tbody>
</table>
**Chronic Tension-Type Headache**

This is notoriously difficult to treat, and responds poorly to pharmacologic intervention. If there is a neck-related component, a physiotherapy assessment might be useful, as cervicogenic pain can mimic tension-type pain in both severity, location and quality.

Suggested Plan of Management:

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lifestyle Factors</strong></td>
<td>As above</td>
</tr>
<tr>
<td><strong>Psychosocial Stressors</strong></td>
<td>Address significant stressors, Treat co-existing depression</td>
</tr>
<tr>
<td><strong>Take drug history</strong></td>
<td>Withdraw any analgesic used &gt;10 times per month, Avoid codeine based or opiate drugs</td>
</tr>
<tr>
<td><strong>Medication</strong></td>
<td>Naproxen 500mg twice daily for 3 weeks, if no improvement do not repeat Amitriptyline 25mg once daily, increasing by 25mg every 2 weeks till on maximum 150mg daily</td>
</tr>
</tbody>
</table>

Referral of Chronic Tension-type Headache is not normally necessary, but Imaging can be performed via the Virtual Clinic if you are unable to reassure your patient that there is no serious problem.
Cluster Headache

(A) Acute Treatment
  (A) High flow Oxygen as close to 100% as possible, at a rate of 15 litres per minute. A BOC CD-type cylinder comes fitted with an appropriate regulator, and costs c GBP24 per cylinder. A CD-type cylinder contains 450 litres of compressed oxygen. >90% of people with cluster headache will be pain free within 20 minutes of starting high flow oxygen. A rebreathing mask should be requested to maintain as high an O2 concentration as possible.
  (B) Subcutaneous Sumatriptan 6mg - can be repeated to a max of 12mg per 24 hours

(B) Prophylaxis
  (A) Verapamil 40mg tds, increasing after 2 weeks to 80mg three times daily - will need to stop beta-blockers due to risk of heart block, and check an ECG before dose titration to 80mg three times daily. Under specialist direction can be used at doses of 320mg three times daily. Will usually reduce headache frequency within about 2 weeks, and can be stopped once pain free for 4 weeks.

Trigeminal Neuralgia (TN)

If there are typical features, Carbamazepine can be started at 100mg twice daily, increasing within 7 days to 200mg twice daily, and titrating to a maximum of 400mg twice daily. Classic TN usually responds rapidly to Carbamazepine.

If Carbamazepine is contra-indicated, Lamotrigine 50mg daily, increasing after 7 days to 100mg daily could be used.

Clonazepam 0.5mg nocte can be given if sleep is disturbed

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If there is no rapid improvement with medication, please email to organise brain imaging and get further advice.

Referral Criteria to Neurology Out-patients.

<table>
<thead>
<tr>
<th>Your Diagnosis</th>
<th>When to Refer</th>
<th>What to Expect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Migraine</td>
<td>Infrequent severe disabling attacks with no response to acute Rx or prophylaxis or lifestyle issues as outlined above</td>
<td>Advice on Medication initially</td>
</tr>
<tr>
<td></td>
<td>Continued headache despite x2 different prophylaxis</td>
<td>Out-patient appointment with completed headache diary OR Triage to Imaging study if anxiety about cause is main issue</td>
</tr>
<tr>
<td></td>
<td>Daily Headache with weekly or more frequent migraine attacks and no response to prophylaxis or lifestyle adjustment</td>
<td>Most likely Chronic Migraine. Routine OP appointment with completed headache diary OR Triage to imaging study if anxiety about underlying cause is main concern</td>
</tr>
<tr>
<td>New Onset Persistent Headache</td>
<td>Any persistent or progressive focal neurological deficit</td>
<td>Triage to Brain Imaging - MRI compatibility and U+E needed</td>
</tr>
<tr>
<td>Your Diagnosis</td>
<td>When to Refer</td>
<td>What to Expect</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Raised ESR - ? Temporal Arteritis</td>
<td>Urgent OPC appointment for ? Temporal Artery Biopsy</td>
<td></td>
</tr>
</tbody>
</table>
| Suspected Intracranial Pressure Disorder  a) Obesity and pulse-synchronous tinnitus suggest raised pressure  
b) Complete and dramatic relief of pain on lying flat suggest low pressure | Triage to Brain Imaging                                                      |                                                                |
| Exertional Headache                    | An abrupt onset headache that repeatedly occurs following exertion, including sexual intercourse / orgasm. NB this pathway is only suitable for recurrent attacks - a first episode should be managed as thunderclap headache | Triage to Brain Imaging to exclude Chiari Malformation or Reversible Cerebral Vasoconstriction Syndrome |
| Cervicogenic Headache                  | No response to NSAIDS or declined assessment by physiotherapy                | An assessment to confirm diagnosis. Might refer onwards to Pain clinic to consider facet joint procedure OR Triage to imaging study if anxiety about underlying cause is main concern |

Neurology In General Practice

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<table>
<thead>
<tr>
<th>Your Diagnosis</th>
<th>When to Refer</th>
<th>What to Expect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster Headache</td>
<td>All classic cases should be discussed using Virtual Clinic. Can be referred for face to face assessment if no response to initial treatment</td>
<td>Initially will be triaged to imaging as cluster-like headache is associated with sphenoid-pituitary disease. Out-patient appointment will be offered once scan result available.</td>
</tr>
<tr>
<td>Tension-type Headache</td>
<td>There is not usually any reason to refer, unless there is a high level of headache morbidity and concern about underlying cause</td>
<td>Triage to imaging study if anxiety about underlying cause is main concern.</td>
</tr>
</tbody>
</table>

**Triage to Imaging Studies**

In general, MRI will be used, unless a patient is not MRI compatible. A U+E should be taken at time of referral (we can look up the result on Labs), as this is required if CT imaging is to be performed.

An MRI compatibility questionnaire should be completed, and an up to date contact telephone number provided.

About 3% of brain imaging studies have an incidental abnormality, and people with complex incidental findings will be offered an appointment for review.

The most common symptomatic lesions identified are Chiari Malformation and severe paranasal sinusitis.

**Further Information**


[www.nice.org.uk/cg150](http://www.nice.org.uk/cg150)
Acknowledgements
Elaine Johnston for preparation of the document, and co-ordinating the Virtual Clinic service
Dr Orla Gray who had a significant contribution to the First Edition of the Guide.