A synopsis of:

Diagnosis and Management of Headaches in Adults:

A national clinical guideline

Scottish intercollegiate Guidelines Network SIGN

November 2008

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KEY NOTES

1. Patients with a pattern of **Recurrent, Severe, disabling** headaches associated with **Nausea and photophobia/phonophobia** and who have a normal neurological exam should be considered to have **MIGRAINE**

2. **Oral Triptans** for acute treatment of all severities of **Migraine** if previous attacks were NOT controlled by Analgesics
    a. NEVER use Opioids for Migraine

3. If aura is
    a. Purely negative
    b. Very rapid in onset
    c. Very short
        i. Consider **TIA**

4. Patients with Headaches and **Red flag** should be referred

5. Patients with **FIRST Thunderclap** must be referred

6. Intracranial Hypotension should be considered in anyone whose headaches worsen on assuming an upright position (or become worse during the day

7. Conversely intracranial Hypertension should be considered in anyone whose headaches worsen when lying down or bending over

8. Consider **Giant Cell Arteritis** in anyone over 50 with **New** or **Changed** headaches

9. Diagnosis of **Tension Type Headache** in patients with normal neurological exam with **Bilateral, Non-disabling** headache

10. Secondary Mimics of **Trigeminal Autonomic Cephalalgia** so must be referred

11. When patient presents with **Frequent, Brief, Unilateral** headache with **Autosomal** features **Trigeminal Autonomic Cephalalgia** should be considered

12. When a patient presents with chronic Daily Headache that is **purely Unilateral, Hemicrania Continuum** should be considered.

13. **Hemicrania Continuum** – secondary mimics so refer

14. Anyone presenting with **NEW Daily persistent** Headache – Refer. Secondary causes could be
    a. Subarachnoid Haemorrhage
    b. Giant Cell Arteritis
    c. Raised intracranial Pressure
    d. Reduced Cerebro-Spinal Pressure
    e. Post Trauma

15. Patients with Headaches AND Red Flag – refer

16. Patients with **First** headache or **Change** in headache must have
    a. Clinical Exam
    b. Blood pressure
    c. Neurological exam which includes
        i. Fundoscopy
        ii. Cranial Nerve assessments
            1. Pupils
            2. Fields
            3. Ocular movements
            4. Facial Power and Sensation
            5. Bulbar function – Soft Palate, Tongue movement
        iii. Assessment of all 4 limbs
            1. Tone, Power, Reflexes, Coordination
        iv. Plantar Responses
        v. Assessment of gait including Heel/Toe walking

PRIMARY HEADACHES

MIGRAINE

Characteristics

Unilateral
Pulsating
Moderate to Severe
Builds up over minutes to hours
Lasts up to 72 hours
Disabling
Aggravated by physical activity
Nausea
Photophobia/Phonophobia

Treatment of Acute Presentations

1. NSAIDS (avoid Aspirin and Ibuprofen in Asthma)
    a. Aspirin
    b. Paracetamol
    c. Ibuprofen
2. Oral Triptans
    a. **Oral Triptans** for acute treatment of all severities of **Migraine** if previous attacks were NOT controlled by Analgesics
    b. NEVER use Opioids for Migraine
3. Oral or Rectal Emetics

Prophylaxis

1. B blockers	Asthma Diabetes Bradycardia Peripheral Vascular Disease Depression	Anxiety
2. Tricyclic Anti-dep	Angle Closure Glaucoma	Depression TTH Sleep Disturb
3. Topiramate	Angle closure glaucoma Pregnancy Renal Stones	Obesity
4. Valproate	Obesity Pregnancy Liver Disease	Depression

TENSION TYPEHEADACHES

Characteristics

Bilateral
Non-disabling
Tight or Pressing
Not aggravated by physical activity

Acute Treatment

Paracetamol, Aspirin

Prophylaxis

Amitripoline

TRIGEMINAL AUTONOMIC CEPHALALGIA

Characteristics

Unilateral in Trigeminal Distribution
Severe
Ipsilateral cranial autosomal features
Short Duration – 15minutes to 3 hours
Starts and ceases abruptly
There may be background headache between attacks

Secondary mimics need to be eliminated so must refer

TACS are rare and characterised by attacks of severe UNILATERAL pain in the trigeminal distribution.
They are associated with Prominent Ipsilateral cranial autonomic features.

Types of TAC

1. Cluster Headaches (1:1000)
2. Paroxymal Hemicrania PH (1:50000)
3. Short Lasting Unilateral Neuralgiform Headache with Conjunctival Injection and Tearing (SUNCT)
4. Short Lasting Unilateral Neuralgiform Headache with Cranial Autonomic Symptoms (SUNA)

Cluster Headaches

1. Severe
2. Strictly Unilateral
3. Located in combination of trigeminal roots
    a. Orbital

    b. Supraorbital
    c. Temporal Region
4. Ipsilateral autonomic features MUST occur with an attack
5. Starts and ceases abruptly 15 minutes to 3 hours
6. Patient Restless
7. Frequency 1 every second day to 8 per day
8. May be background headache between attacks and migranous symptoms may be present
9. There is often a striking circadian rhythm
    a. Attacks same time each day
    b. Clusters same time each year

Paroxymal Hemicrania, SUNCT and SUNA have similar characteristics to Cluster Headaches but the duration of attacks vary.

WHEN A PATIENT PRESENTS WITH FREQUENT, BRIEF UNILATERAL HEADACHES WITH AUTONOMIC FEATURES A TRIGEMINAL AUTONOMIC CEPHALALGIA HEADACHE SHOULD BE CONSIDERED.

PATIENTS WITH NEW SUSPECT TAC SHOULD BE REFERRED FOR ASSESSMENT.

Acute Treatment

Subcutaneous injection of sumatriptan
Nasal sumatriptan

Prophylaxis

Verapamil

Other Primary and Pseudo Primary Headaches

HEMICRANIA CONTINUUA

Characteristics

Continuous
Purely Unilateral
Waxes and Wanes but NEVER goes
May also have brief stabs

Secondary mimics are common – so refer

Treatment

Indomethacine

NEW DAILY PERSISTENT HEADACHES

Remember that this is not a diagnosis but a description. Can be Primary or Secondary.
Must consider Secondary aetiologies
Must allow 3/12 before diagnosis is made (really chronic)

MEDICINE OVERUSE HEADACHE

This is not a primary headache but is often misdiagnosed as such. Must be excluded –particularly in (New) Daily Persistent Headaches

All medications can produce MOH

SECONDARY HEADACHES

Consider in a patient with

1. **NEW** headache
2. **CHANGE** in headache patterns

Neurological exam which includes

1. Fundoscopy
2. Cranial Nerve assessments
    a. Pupils
    b. Fields
    c. Ocular movements
    d. Facial Power and Sensation
    e. Bulbar function – Soft Palate, Tongue movement
3. Assessment of all 4 limbs
    a. Tone, Power, Reflexes, Coordination
4. Plantar Responses
5. Assessment of gait including Heel/Toe walking

Secondary headaches should be considered in patients with NEW onset headaches
or headaches that differ from their usual headaches.
'RED FLAG' features should be considered. The mnemonic SNOOP T helps.

RED FLAG Features :

1. S Systemic Symptoms or Secondary Risk Factors
    a. FEVER, WEIGHT LOSS, KNOWN CANCER, HIV, IMMUNOSUPPRESSION, PATIENTS WITH RISK FACTORS FOR CEREBRAL THROMBOSIS, JAW CLAUDICATION, VISUAL DISTURBANCE
2. N Neurological Symptoms or Abnormal Neurological Signs in Examination
    a. Symptoms : CONFUSION, IMPAIRED ALERTNESS, DROWSINESS, LIMB WEAKNESS, COGNITIVE DISTURBANCE
    b. Optometry Based Signs : Neurological Screen, Fundoscopy, Pupils, Colour Perception, Ocular Motility
3. O Onset
    a. 'FIRST AND WORST HEADACHE', THUNDERCLAP HEADACHE, SUDDEN OR ABRUPT FROM SLEEP (but remember that migraine is the most frequent cause of morning HAs), PROGRESSIVELY WORSENING.NEW ONSET HEADACHES IN PATIENTS OVER 50,PARIENTS WITH KNOWN CANCER, PATIENTS WITH HIV.
4. O Older
    a. NEW ONSET OR PROGRESSIVE IN OVER 50s. (Temporal Arteritis could also be associated with jaw claudication and temporal tenderness)
5. P Previous Headache History
    a. FIRST HEADACHE OR FUNDAMENTALLY DIFFERENT FROM EXISTING HEADACHE (Significant change in features, frequency, severity, associated symptoms)
6. T Triggered Headaches
    a. HEADACHE PRECIPITATED BY PHYSICAL EXERTION OR VALSALVA ACTIVITIES(coughing, straining, sneezing) HEADACHE THAT CHANGES WITH POSTURE

The following are warning signs or "red flags" for potential secondary headache:

1. New headache in a patient aged over 50 consider Temporal Arteritis
2. First presentation of thunderclap onset. Refer immediately to hospital for exclusion of subarachnoid haemorrhage. intracranial haemorrhage, meningitis, cerebral thrombosis.
3. For patients with headache and features suggestive of infection of the central nervous system(such as fever, rash), refer immediately to hospital.
4. Headache with features suggestive of raised intracranial pressure : changing with posture; valsalva headache (triggered by coughing, sneezing, bending, heavy lifting, straining); Fever; History of HIV or cancer; Focal or non-focal symptoms or signs; papilloedema. Refer urgently.
5. Consider MRI for patients presenting with a trigeminal autonomic cephalalgia.
6. Consider intracranial hypotension in all patients with headache developing or worsening after assuming an upright posture. Refer such patients to a neurologist or headache clinic.