Reflections on NICE Headache Guideline

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Overview

- The process of guideline development illustrated with the headache guideline
- Reflections on the process
- Key recommendations for headache

How NICE Works

- NICE aims to
  - Make evidence based recommendations by independent committees
  - Consider cost effectiveness
  - Be free from political influence
  - Be transparent
  - Collaborate with stakeholders including patients and carers

Topic Selection

- New process -topic referred to NICE from DoH via National Quality Standards Board
- Burden of disease
- Variation in practice
- Cost to the NHS
- Existence of evidence base
- Will this guideline add value?

- One guideline costs £400,000 to produce

Timescale

- The scope is prepared (6 months)
- The Guideline Development Group is established
- Draft guideline is produced (details later) (16-18 months)
- Consultation on the draft guideline – stakeholders comment and independent review panel checks comments taken into account (4 months)
- Final guidance produced (approx 26 months)
- Guidance issued by NICE to NHS

The scope

- Finalised by NICE after public meeting and consultation
- Defines the key areas the guideline will focus on
- Defines the population to be covered
- Sets out the aspects of diagnosis, assessment (including investigations) and clinical management that will be reviewed
- Defines the areas that are excluded
- Aim – to ensure scope must be manageable in size and areas for inclusion must be prioritised

The Scope for Headache Guidelines

- Key issues:
  - Diagnosis of common primary headaches (migraine, TTH, cluster headache,)
  - Diagnosis of medication overuse headache
  - Characteristics of headache which indicate serious underlying pathology
  - Acute and prophylactic pharmacological management
  - Non-pharmacological management (including imaging)
  - Information and support for patients and carers
  - Management of headache in women

The Headache Guideline Development Group

- NICE technical team plus independent experts
- 3 consultant neurologists with interest in headache
- 2 GPwSI's
- 1 paediatric neurologist
- 1 A & E consultant
- 1 specialist nurse
- 1 pharmacist
- 3 patient / carer members (OUCH, migraine trust, patient carer and pubic engagement development manager)
- Chair- professor of primary care research
- Co-opted members (psychologist, acupuncturist, manual therapist and expert in migraine in women's health)

Guideline Development- the overall process

Technical team tasks

- project management
- Search for evidence
- Appraise and summarise evidence
- Draft guidance

- Guideline team tasks
- Agree clinical questions based on scope and identify key areas for economic analysis
- Interpret summarised evidence
- Agree recommendations
- Contribute to writing the guidelines
- Review drafts and stakeholder comments

Looking for Evidence

- GDG members formulate ‘key clinical questions’ based on the scope
- Technical team research questions
- Done according to standard protocol - PICO

Example key clinical question

- In primary headaches what is the clinical/cost effectiveness of imaging as a management strategy?

What is the clinical / cost effectiveness of imaging as a management strategy

Population	Intervention	Comparison	Outcome
Patients over the age of 12 with the following primary headaches – migraine with or without aura, menstrual migraine, chronic migraine, tension type headache, cluster headache	MRI CT	No imaging	Resource use including GP consultation, A and E attendance, investigations and referral to secondary care Change in headache frequency and intensity (with eg. Headache impact test or migraine disability assessment test) Change in frequency of acute medication use Change in anxiety or depression (eg HAD) Change in health related quality of life (eg SF-36 or EuroQoL) Incidental radiological findings

Reflections

- The Good bits
  - Chance to meet and work with experts in the clinical and research field
  - Increased personal confidence in management of patients and teaching other professionals
  - Opportunity for small amount of influence nationally- particularly to raise awareness of the GPwSI role
  - Fascinating insight into such a widely respected body
  - The quality of evidence review is excellent

Reflections

- The not so good bits
  - Even NICE doesn't have endless resources to research all the clinical questions we would have liked
  - I was surprised by the lack of quality (or any!) evidence in some areas
  - Restricted to looking at cost effectiveness of headache management in context of NHS and social services costs rather than to the economy as a whole
  - May disadvantage good treatments when trials have not been funded
  - Steep learning curve – did not sometimes understand impact of earlier decisions

The Guidelines-Recommendations

- Do not make immediate diagnosis of primary headache if warning features are present

- Worsening headache with fever
- Thunderclap headache
- New-onset neurological deficit
- New-onset cognitive dysfunction
- Change in personality
- Impaired level of consciousness
- Head trauma within 3 months
- Headache triggered by cough, valsalva or sneeze
- Headache triggered by exercise
- Headache that changes with posture
- Clinical features of giant cell arteritis
- Clinical features of glaucoma
- Significant Change in characteristics of headache
- Atypical aura

- In addition caution if:

  Previous malignancy (esp if age < 20)

  Cancer which may metastasise to brain

  Immunocompromised patients

- Exclude medication overuse headache
  - More common in migraine sufferers

Diagnosis -primary headache

- Migraine
- Tension type headache
- Cluster headache

- Table in guidelines

Neuroimaging

- Do not refer solely for reassurance
  - 0.6 – 2.8% incidental abnormalities
- Imaging in cluster headache – further research needed

Management

- General
  - Discuss diagnosis
  - Reassure / empathise
  - Discuss therapy options
  - Direct to information and support groups
  - Review and reassess
  - Warn about medication overuse headache

Specific Management

- 1) Tension Type Headache
  - Acute– aspirin, paracetamol, NSAIDs
  - Not opiates

  - Prophylaxis– nil pharmacological recommended
  - May consider acupuncture
  - Consider migraine prophylactics if features of chronic migraine

2/ Migraine

- Acute
  - Combination therapy of triptan + paracetamol / NSAID superior to monotherapy
  - Can add antiemetic
  - If oral not effective or tolerated use IV or non-oral metoclopramide or prochlorperazine

Migraine continued …

- Prophylaxis
  - Topiramate most clinically and cost effective
  - Propranolol also suitable first line
  - Some evidence to support gabapentin
  - No robust evidence available for other prophylactics eg amitriptyline, pizotifen, sodium valproate
  - Some evidence for riboflavin and acupuncture

Special considerations in female migraine patients

- Do not use combined hormonal contraception in patients with aura – possible increased risk of ischaemic stroke
- In menstrual related migraine consider perimenstrual prophylaxis with frovatriptan or zolmitriptan
- Minimise use of all medication in pregnant women, and refer to specialist if considering prophylaxis

3/ Cluster Headache

- Acute
  - Oxygen
  - Subcutaneous or intranasal triptan
    - Oral do not work
- Prophylaxis
  - First line verapamil – needs ECG monitoring

Medication overuse headache

- Must withdraw overused medication
- Withdrawal best done abruptly for at least 1 month
- No evidence base, but prophylactics can be used as adjuvant to withdrawal

Summary

- Brief overview of the guideline development process within NICE
- Summary of some of the salient points of the new headache guidelines

- Any questions?