The 45-year-old woman with ‘monthly’ headaches

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Learning Objectives

• Use of diary cards for establishing patterns of attacks
• Importance of optimising acute treatment
• Indications for hormonal/non-hormonal prophylaxis
• Importance of co-morbidity
First Stage
Case History

• 45-year-old woman with monthly headaches
• ‘Sick’ headaches since age 15 years
• Increased frequency over last four years
• She presents now because she is losing 1-2 days from work each month
Case History

• Over last 4 years
  – Two to three attacks per month
• Other history
  – Otherwise healthy
Other Historical Facts

• She used the combined oral contraceptive pill for contraception between pregnancies
• Since her 4\textsuperscript{th} child was born 4 years ago, she has used condoms
• Not troubled by headaches during pregnancy but they returned when her periods returned
Physical Examination

• On examination she looks in good health but a little pale
• Physical examination and neurological assessments were unremarkable
• BP 120/80
• BMI 22 kg/m²
Initial Impression

• She has had episodic headaches associated with nausea for the last 25 years
• She is free of symptoms between attacks
First Stage Questions

• At this stage what is the most likely diagnosis?
• Is there any other information you would like to know about the case?
• What initial investigations, if any, would you like to consider?
Second Stage
What are the headache diagnoses?

- Episodic tension-type headache?
- Migraine without aura?
- Pure menstrual migraine?
- Menstrually-related migraine?
Diagnosis

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Symptomatic drugs: Triptan
Daily prophylactic drugs: None
Hormones: None
Other regular medication: Multivitamins

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Summary

• Diary confirms menstrual attacks occur regularly starting on or between days -2 to +3 of menstruation; duration 3-4 days

• She has 1-2 additional attacks per month; duration 1 day

• Her menstrual cycles are usually regular

• Periods last 7 days

• Migraine more likely after period as started than before period starts
Clinical pearls

• Diary cards give a great deal of information
  – Pattern of attacks
  – Duration of attacks
  – Association with menstruation
  – Pattern of menstruation
More analysis

• On questioning she has had dysmenorrhoea and menorrhagia for about 4 years
• She looks pale
Second Stage Questions

- How should she treat the attacks?
- Are any investigations indicated?
Third Stage
Management

• She takes a triptan at the onset of symptoms which is effective for non-menstrual attacks
• Menstrual attacks less responsive to symptoms with repeated relapse of headache
Management issues

• Relapse is less likely with:
  – A long-acting triptan (naratriptan/frovatriptan)
  – Combining a triptan with naproxen
Lab and investigations

- Full blood count on the basis of pale and heavy periods
  - suggests iron deficiency anemia
Third Stage Questions

• Would she benefit from prophylaxis?
• Is the anemia relevant?
• Are any further investigations indicated?
Final Stage
Management

• What are her options for prophylaxis?
  – Continuous?
  – Perimenstrual?
Management

• Perimenstrual options include
  – Perimenstrual triptans
  – Perimenstrual estrogen supplements
  – Perimenstrual prostaglandin inhibitors e.g. naproxen
Management

• Naproxen is licensed for treatment of dysmenorrhea
• Also reduces menorrhagia but not as effective as….?
Outcome

- Diagnosis
  - Menstrually-related migraine

- Management
  - Symptomatic
    - Long-acting triptan
  - Perimenstrual prophylaxis
    - Naproxen 500mg twice daily for 7 days starting on day 1 of period
Follow-up

• 3/12
  – Migraine and menstrual symptoms well-controlled but gastric irritation with naproxen
  – Alternative options to naproxen
    • Mirena intrauterine system
    • Combined hormonal contraception
Follow-up

• 6/12
  – 1-2 migraine attacks per month lasting 1 day and well controlled with triptans
  – Mirena intrauterine system
    • Amenorrheic
    • No signs or symptoms of anemia
Final Considerations

• Menstrually-related migraine
• This case demonstrates the usual features of the disorder, including associated menstrual disorders
• Management of menstrual migraine should include consideration of an underlying menstrual disorder and contraceptive needs
Reference

MacGregor EA. Diagnosis and management of menstrual migraine. Prog Neurol Psychiat 2011;15(2):11-16