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Migraine and hormonal contraceptives

Department of Community Medicine,
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University of Tromsø, November 2017

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Presentation outline

- What is migraine?
 - Symptoms and signs
 - Diagnosis
 - Pathophysiology
- Prevalence of migraine
- Migraine and estrogen
 - What is the connection?
- Migraine and hormonal contraceptives
 - Possible complications and advantages of hormonal contraceptives
 - Important considerations
- Summary
- Migraine and pregnancy (If time)

- References

What is migraine?

- Migraine is a primary headache disorder
- Characterized by episodic, moderate to severe headache
- Different types of migraine, migraine with and without aura are the most common



What is migraine?

- Diagnostic criteria

- Ref: International Headache Society

- Headache Classification Committee of the International Headache Society (IHS). The International Classification of Headache Disorders. 3rd edition (beta version). *Cephalalga* 2013; 33(9): 628-808

Diagnostic criteria:

A. At least five attacks¹ fulfilling criteria B-D

B. Headache attacks lasting 4-72 hr (untreated or unsuccessfully treated)^{2;3}

C. Headache has at least two of the following four characteristics:

1. unilateral location

2. pulsating quality

3. moderate or severe pain intensity

4. aggravation by or causing avoidance of routine physical activity (eg, walking or climbing stairs)

D. During headache at least one of the following:

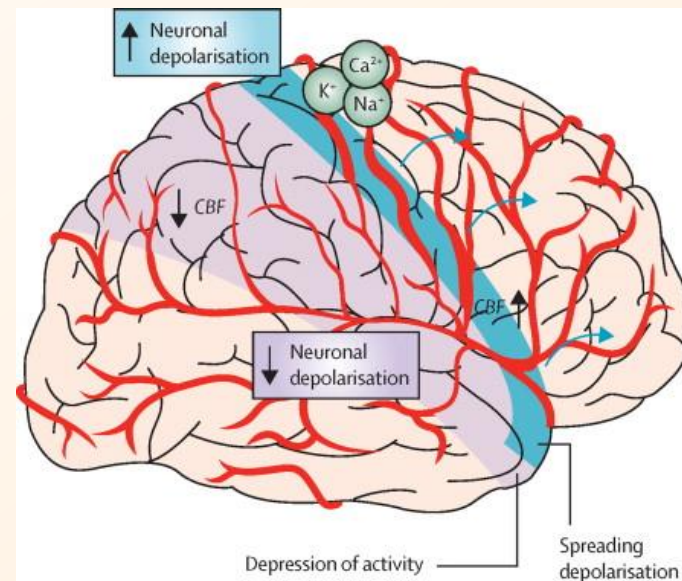
1. nausea and/or vomiting

2. photophobia and phonophobia

E. Not better accounted for by another ICHD-3 diagnosis.

Pathophysiology of migraine

- The pathophysiology of migraine is still not fully understood
 - Cortical spreading depression
 - Trigeminovascular system
 - Sensitization



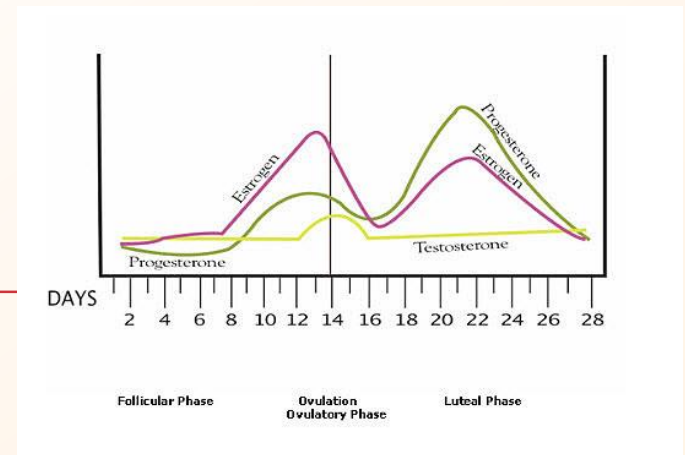
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Migraine prevalence

- Prevalence is 12% in the general population, 17-19 % in women
 - With an age-specific prevalence of up to 25 % in women
 - Prevalence is highest in fertile women
- Migraine is largely known as a “Women’s disease”

Migraine and estrogen

- Migraine is most common in fertile females
- Known association between migraine and estrogen
 - Fall in estrogen levels trigger migraine-attacks
 - Menstrual migraine
- Increased likelihood of migraine among premenopausal women who use estrogen containing OCs
- Association of migraine onset and hormonal events (menarche, child birth and OC use)



Migraine and hormonal contraceptives

- Headache is a possible side effect to hormonal contraceptives
- Both improvement and worsening of migraine can be seen
 - Some experience no change at all
 - Menstrual migraine tend to improve, but not always
 - Usually a good idea to try OCs/patch first, before implant/IUD/injection as worsening can occur
- Monophasic contraceptives is often preferred, especially for menstrual migraine
- Progestogen-only containing OCs/hormonal contraceptives is preferred, because of the know association between estrogen withdrawal and migraine and because of possible increased risk of stroke

Important considerations

- What kind of headache is it?
 - Migraine or other kind of headache?
 - Migraine with or without aura?
 - About 10-20% have migraine with aura
 - Headache diary
- Migraine WITH AURA is associated with increased risk of stroke
 - Evidence regarding migraine without aura and associations with increased risk of stroke is inconclusive

Summary – Take home message

- What kind of headache is it?
 - Migraine or not? With or without aura? Menstrual migraine?
- Patients with migraine with aura should not be prescribed estrogen-containing/combined OCs/hormonal contraceptives
- Take care when prescribing combined OCs/hormonal contraceptives to patients with migraine without aura
 - Other risk factors for thromboembolic disorders?
- Migraine can both be worsened or improved by hormonal contraceptives
 - Usually a good idea to try a OC/patch/ring before IUD/injection/implant
 - Usually a good idea to try a hormonal contraceptive that has an even distribution of hormones
 - Usually a good idea to give a progestogen-only containing contraceptive

Refereces

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Migraine and pregnancy

- Two thirds have significant improvement of migraine during pregnancy, especially during the second and third trimester
 - Some experience worsening in the first trimester, and then improvement
- A small proportion of women experience onset of migraine during pregnancy
 - Distinguishing first-time migraine from other types of headache