1 Oh MY-Graine, It’s Time For Prophylaxis!
Geena Eglin, PharmD
PGY1 Community Pharmacy Resident
Pharmacy Grand Rounds March 4th, 2019

2 Disclosures
• I have nothing to disclose.

3 Objectives

4 Epidemiology

5 Migraine Pathophysiology
1. The Role of Serotonin
2. Sensitization
3. Calcitonin Gene-Related Peptide

6 The Role of Serotonin
• Appears to be involved in the cause; known importance for treatment
  
7 Sensitization
• Process:
  • Neurons become increasingly responsive to nociceptive and non-nociceptive stimulation

8 Sensitization
• Responsible for the clinical symptoms of a migraine
  
9 Calcitonin Gene-Related Peptide (CGRP)
• Amino acid neuropeptide
• Expressed in the trigeminal ganglia nerves
• Proposed mechanism of action:
  • Potent trigeminovascular pain transmission from the intracranial vessels to the CNS

10 Migraine Classification
Migraine Without Aura
Migraine With Aura
Migraine Without Headache
Migraine With Brainstem Aura
Chronic Migraines

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Current Prophylaxis for Chronic Migraines:

International Headache Society

2018 Updated Guidelines

Nonpharmacologic Interventions

Pharmacologic Interventions

Treatment Mechanism

CGRP Antagonists

Place in Therapy

CGRP Antagonists

Inhibition of Pain Transmission

Neurogenic Inflammation Blocker

CGRP Antagonists

Aimovig (erenumab-aooe)

Ajovy (fremanezumab-vfrm)

Emgality (galcanezumab-gnlm)

EVOLVE-2 Study Design

- 858 patients with episodic migraine to monthly subcutaneous galcanezumab 120 mg, galcanezumab 240 mg, or placebo in a 1:1:2 ratio
36 **Inclusion Criteria**
- 18-65
- At least 1-year migraine history
- At least 14 migraines headache days per month
- Mean of at least 2 migraine attacks per month within the last 3 months
- Diagnosed prior to age 50

37 **Exclusion Criteria**
- On preventative medications
- Aged < 18 or > 65
- Pregnant
- Possibility to become pregnant

38 **Results**
- At six months, the mean number of migraine days per month decreased by 4.7 and 4.6 for the galcanezumab 120 and 240 mg groups, respectively, compared with 2.8 days for the placebo group.

39 **Results**
- Treatment with galcanezumab 120 mg or 240mg demonstrated statistically significant and clinically meaningful maintenance of effect in patients with episodic migraine (at least 3 and 6 consecutive months) and in patients with chronic migraine (for 3 months).

40 **Recommended Dosing**
- Galcanezumab-gnlm treatment is started with a loading dose of 240 mg, given as two consecutive doses of 120 mg each, followed by monthly doses of 120 mg
- administered subcutaneously in the thigh, upper arm, or buttocks
- Injection site reactions were the most common adverse events in clinical trials

41 **Take Away Points**

42 **Take Away Points**
- Don't forget non-pharmacologic interventions

43 **What's Next?**

44 **THANK YOU!**

45 **CE Credit**
- Please text CE Code to: 413-200-2444

Attendance code: LONBUZ
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