

ADDITIONAL RESOURCES



MINING THE OUTER REACHES OF HEADACHE SCIENCE

LEARNING OBJECTIVES

As a result of participation in this initiative, participants will increase their ability to



1. Describe

Describe mechanisms of action of new therapeutics as acting on pathophysiologically determined targets.



2. Analyze

Analyze safety and efficacy profiles for new and emerging therapies in acute and preventive treatment of migraine.

FACULTY



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OUTCOME QUESTIONS: ANSWERS AND EXPLANATIONS



LEARNING OBJECTIVE 1

Describe mechanisms of action of new therapeutics as acting on pathophysiologically determined targets.

1. Anti-CGRP mAbs and gepants decrease activation of
 - A. C Fibers
 - B. 5-HT_{1F} receptors
 - C. A Delta fibers**
 - D. AMY1 receptors

Explanation

The mAbs and gepants decrease activation of A delta and hence HT neurons; at this point, it is not expected that either mAbs or gepants penetrate. Therefore, effects will be subsequent from what happens at the dural and trigeminal ganglion areas.

Reference

Goadsby PJ, Holland PR, Martins-Oliveira M, Hoffmann J, Schankin C, Akerman S. Pathophysiology of migraine: a disorder of sensory processing. *Physiol Rev.* 2017;97(2):553-622.

OUTCOME QUESTIONS: ANSWERS AND EXPLANATIONS



LEARNING OBJECTIVE 2

Analyze safety and efficacy profiles for new and emerging therapies in acute and preventive treatment of migraine.

2. 42-year-old woman presents to clinic for follow up of episodic migraine. She has tried a beta blocker and an anti-epileptic for migraine prevention but did not tolerate the side effects of either. She saw an advertisement for a new treatment option for migraine and was wondering about the medication. She has a history of constipation and chest pain that is not cardiac in nature. You discuss CGRP monoclonal antibodies. She asks if they are safe. How do you respond?
- A. Of course, let me get you a sample of whatever I have left.
 - B. CGRP mAbs have minimal side effects. One of the three current options has a side effect of constipation in a small portion of patients in the clinical trials. All three have the potential to cause injection site reactions.**
 - C. No, they are not safe if you have chest pain.
 - C. The CGRP mAbs all work well; let me see what I have in the fridge.

Explanation

There should be a clear discussion of side effects within the context of the patient profile and preferences. No preference should be stated by provider indicating bias except to discuss the potential for optimal outcomes given the patient's health status and treatment goals.

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