Managing Medication Overuse Headache
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Story from the front lines

A middle-aged woman presented to clinic to establish care and discuss recurrent headaches. The patient reports that this all started about 2-3 years ago after a car accident where she suffered whiplash. Her headaches were usually bilateral and started from what she presumed was tension in her neck. The pain would then move over the front of her scalp and cause a throbbing type pain that was severe. She stated that initially the medications helped but over time they had seemed to wear off, and now she was taking medicine every day to help her get through the day. During previous workup she stated that doctors found an aneurysm on MRI and to her understanding that was causing her headaches pains to increase to the point where oxycodone 5mg was not helping her get through her day to day function. Record review notes an incidental aneurysm secondary to congenital PCA absence, a common variant in the posterior cerebral circulation. (1) She stated that she would take the max dose of ibuprofen and acetaminophen every day to try to catch the headaches with oxycodone, as needed, before they started. Overall her headaches had a changing character over every few days but were manifest by bilateral tension type headaches stemming from her neck for which she was chronically taking ibuprofen, acetaminophen and oxycodone. She had seen multiple providers for this problem without clear understanding of the likely etiology and management of her symptoms.

Teachable Moment

When seeing a new patient that is managed by multiple clinicians, reviewing outside records is very important. Without them it is easy to stumble down a rabbit hole where you are making matters worse; the antithesis of a doctor's role. This patient had received many evaluations though did not have a clear sense as to what was likely causing her symptoms. Indeed, she had become concerned that a brain malformation was causing her headaches, a worrisome thought for any person.

At the time of presentation, the most likely cause of the patient's headaches was medication overuse. The patient was also understandably anxious due to a misunderstanding of an MRI result, which is often not required in the evaluation of headache without "red flag" signs or symptoms. Headaches and migraines are still poorly understood from a biophysical nature and MRI studies usually are not helpful in determining the cause of headache. Focal neurologic deficits, suspicion for a tumor, recent trauma, new onset headache unresponsive to therapy can all be reasons to pursue imaging studies, but without those signs the chance of finding an anatomical abnormality at fault for the HA is <1%. (2,3)

Medication-overuse headache (MOH) is a chronic daily headache and a secondary disorder in which acute medications used excessively causes headache in a headache-prone patient. (4) While talking with the patient, she stated she was never counseled about the possibility of medication overuse headaches and trying to stop the medications for a period of time to see if it helped.

Medication overuse headaches prevalence rages from 1% to 2% with a 3:1 female to male ratio. It also can have a simple and effective treatment, offending medication discontinuation. As physicians we can easily forget the effect over the counter medicines can have on our patients, and there can be little record of the medicines people take if they are unfamiliar with the names/do not remember what they take. In this setting, it can be very difficult to make a proper decision on how to best help a patient, but it is usually best to start simple, and stopping medicines is a simple solution to medication overuse headache.

1. Zampakis P, Panagiotopoulos V, Petsas T, Kalogeropoulou C. Common and uncommon intracranial arterial anatomic variations in multi-detector computed tomography angiography (MDCTA). What radiologists should be aware of. Insights into imaging. 6 (1): 33-42. doi:10.1007/s13244-014-0381-x - Pubmed
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