

Headache who to be investigated?

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Headache is such a common disorder that its lifetime prevalence can safely be presumed to 100% in any population. In fact this is the commonest pain for which patients consult a doctor. Humans are so much annoyed with this pain that they label every difficult problem as a "headache". One of the Punjabi proverb says, "bigger the head, bigger are the headaches" meaning people with more responsibilities have more problems to solve.

Human beliefs about headache and its treatment have been very interesting and human relation with headache dates back to ancient times.¹ About 7000 BC, people believed that headache occurred because of entrance of demons and evil spirits in head. They practiced trepanation (Making a hole in skull bone) to release these spirits from head. Neolithic skeletons have been found to have holes in their skulls. Interestingly, at least some of these patients survived because of the evidence that some of these skulls had new bone formation at the edges of these holes. Trepanning seems to continue till seventeenth century because in 1660, William Harvey suggested trepanation to a patient who had intractable headache. Around 1200 BC Egyptians would bind a crocodile made of clay tightly around the head of headache patients. The linen with which this crocodile was tied displayed names of gods on it. It was believed that these gods would cure the headache. Around 400 BC, Hippocrates not only described aura of migraine as flashing light

preceding headache, but also defined some of its triggering factors such as intercourse and exercise. He also believed that vapours arising from bile in the stomach rise to head to cause headache and that vomiting out of this bile relieve the headache.

In 12th century Hildegard of Bingen, a nun wrote a very vivid account of her headache. She also made drawings of her visual aura.¹ These manuscripts show that she was suffering from classical migraine.

Headaches are broadly classified into three broad categories²

- primary headaches
- secondary headaches and
- cranial neuralgias & other facial pains.

Most important in primary headaches are, among others, migraine, cluster headache and tension type headache. Secondary headache is because of multiple causes, most common being intracranial tumors, aneurysms and giant cell arteritis. Fortunately most of headaches are primary³, they are benign albeit very disturbing and annoying. They do not require extensive investigation. On the other hand, one should always remember that headache with serious sequel do occur. So which headache should be investigated is a very important question.

Why this question becomes important is because of following facts:

- Headache being globally common, practically every human being will require investigation at some stage of life, if not filtered.
- Investigations for headache are quiet costly so investigating every headache will not be a cost effective practice.
- Investigations are unrewarding for

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most of primary headaches making it a futile exercise

- Investigations per se are not free of harm, some of hazards are exposure to radiation, allergic reaction to contrasts, overdose of sedating drugs in case of claustrophobic patients undergoing MRI etc.

US headache consortium has laid down following principles for investigation of headache.⁴ These principles are based on consensus, not any evidence.

1. Testing should be avoided if it is not going to change the management of patient
2. Testing is not recommended if patient is no more likely than general population to have a significant abnormality
3. Exceptions can be made for individuals that are disabled for fears of serious pathology, even in the absence of known predictors of abnormalities on neuroimaging studies

Therefore people have identified certain features in history and physical examination which will help to identify patients who need further investigation. Some of these features are thunderclap headache, headache with atypical aura, new onset headache in patients >50 years or <10 years, persistent morning headache with nausea, progressively worsening headache⁵ headache associated with postural change, headache in patients with cancer or HIV infection, history of head or neck injury or weight loss. Some abnormal physical findings like scalp tenderness, pyrexia, nuchal rigidity, papilloedema, abnormal

mental status and neurological findings also warrant for further investigation.^{5,6,7}

Apart from all above, there are at least two more very strong indications for investigation of headache. They are patient's overwhelming concerns about his headache that are resistant to reassurance and physician's sixth sense feeling about probability of some serious underlying disorder.

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