

## DISORDERS PRESENTING WITH HEADACHE AS THE SOLE SYMPTOM

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### ABSTRACT

Headache is one of the commonest medical complaints<sup>1</sup>, and ranks high among the reasons why people consult neurologists and general practitioners<sup>2</sup>. Most headache patients are, however, managed suboptimally<sup>1</sup>; and indeed, many neurologists find outpatient headache management one of the least engaging parts of their job<sup>3</sup>. Headache may present as part of a symptom complex or it may present alone. When it is part of a complex, the total presentation of the patient serves as pointer to any underlying disease. When it is the sole symptom however, identifying the specific cause can be more difficult. Even though the diagnosis and management of most cases of headache probably do not require sophisticated neurological skills or investigations, failure to recognise an underlying disorder or an attitude of total neglect can be fatal. In this paper, we briefly review some of the disorders reported to have presented with headache as the sole symptom with the aim of drawing attention to the need for proper attitude to every headache complaint even when it initially appears to be trivial. Two groups of headache are recognised - primary and secondary. More than 90% of headaches seen in practice are of the primary type<sup>1</sup>, which includes migraine, tension and cluster headaches. Secondary headache results from a wide range of disorders which may be intracranial, extracranial or systemic. Intracranial causes of headache include tumours, haematomas, infections, idiopathic intracranial hypertension and vascular disorders. Some of the more common extracranial and systemic causes are shown in Tables 1 and 2 respectively. Recognition of these conditions requires a standardised diagnostic approach to history and examination, wherein the patient's history alerts the physician while the physical examination provides support for the diagnosis.

**Key Words:** Headache, sole symptom, underlying disorder, warning signal.

Some of the disorders in which headache has been reported to be the sole symptom include:

**1. Interhemispheric subdural haematoma:** This relatively uncommon condition is usually seen in patients with bleeding disorders<sup>4</sup>. It most commonly presents with hemiparesis, impaired consciousness and seizures. Some investigators have proposed its inclusion among the diagnostic possibilities in elderly patients with new-onset headache if signs of meningeal irritation, focal neurological deficits or alteration of consciousness<sup>4</sup> are absent.

**2. Solitary cerebral cysticercus granuloma:**<sup>5</sup> is primarily caused by the larval form of Taenia solium and presents with partial seizures as the major symptom in 70 to 88% of patients. When headache is the only symptom, it can be confused with other acute central nervous system illnesses. It is opined that contrast-enhanced brain computed tomography scan be performed in patients in endemic areas for cysticercosis who present with sudden onset of severe headache<sup>5</sup>.

**3. Intracranial venous thrombosis:** This rare but potentially fatal condition affects mostly young to middle-aged patients. Head trauma and infections are among the best known causes, with pregnancy and the puerperium being periods of increased susceptibility<sup>6</sup>. It

Sometimes presents with symptoms similar to those of postdural puncture headache, and can therefore be easily misdiagnosed, especially in a parturient that has undergone spinal anaesthesia. This is particularly significant because of the difference in the management between both conditions. Whereas the former might require anticoagulation, postdural puncture headache may require an epidural blood patch which cannot be performed in the presence of anticoagulation.

**4. Myocardial infarction.** Here, the blood supply to parts of the heart is impaired with consequent ischaemia and necrosis. The patients typically present with chest pain, nausea, vomiting, palpitations and sweating. When headache is the only symptom<sup>7</sup>, it may be exertional in nature with a gradual onset which correlates with ECG (electrocardiogram) changes. Its mechanism is not well understood; and theories that have been advanced include: coronary and cerebral vasospasm<sup>8</sup>; anatomical variation with convergence of the sympathetics or vagus nerve and cervico-thoracic somatic input with the pars caudalis of the trigeminal nerve resulting in referred pain in areas of its distribution<sup>9</sup>; decreased cardiac output resulting from ischaemia which may either lead directly to cerebral hypoperfusion<sup>8</sup> or decreased venous return and a subsequent rise in intracranial pressure<sup>7</sup> and the release of endogenous chemical mediators which affect

intracranial pain-sensitive structures during a myocardial infarction<sup>7</sup>. It is opined that acute myocardial infarction be included in the differential diagnoses of acute severe headache in elderly patients.

**2. Enlargement of the sella turcica:** In his series of 46 patients with enlarged sella turcica and pneumographic evidence of intrasellar mass that were initially untreated, Weisberg reported that headache was the sole symptom in one patient who finally required treatment<sup>10</sup>.

**3. Intracranial aneurysms:** Most persons with unruptured intracranial aneurysms are usually asymptomatic. Aneurysms can be the cause of unusual headaches when they enlarge prior to rupture or by compressing adjacent brain structures. Headaches may also be the sole presentation in patients with sentinel haemorrhages.

Table 1: **Extracranial Causes of Headache.**

Cervical spondylosis
Dental infections
Paranasal sinusitis
Primary angle closure glaucoma

Table 2: **Systemic Causes of Headache.**

Fever
Dehydration
Hypoglycaemia
Hypertension
Bacteraemia

## DISCUSSION

Most headaches are harmless and self-limiting. When they are associated with a specific pattern of symptoms, the diagnosis may be obvious and no further testing may be required. However, they may also be warning signals of serious underlying disorders. This is particularly true of headaches caused by inflammation, including those related to meningitis and diseases of the sinuses, spine, neck, ears and teeth. Thorough history and physical examination are necessary in every case where headache is the only symptom, especially in elderly patients, and where the symptom is chronic. Further tests may be indicated if any abnormalities are detected on examination or when the diagnosis is uncertain. The nature and extent of further evaluation of the patient will depend on the physician's suspicion.

## CONCLUSION

A number of conditions can present with headache as the sole symptom. Every presentation of headache should be taken seriously and duly investigated as it

could be the only indication of severe underlying disease which, if missed, may lead to a fatal outcome.

## REFERENCES

1. Ravishankar K. Optimising primary headache management. J Assoc Physicians India 2006; 54: 928-934.
2. Hopkins A, Menken M, De Friese GA. A record of patient encounters in neurological practice in the United Kingdom. J Neurol Neurosurg Psychiatry 1989; 52: 436-438.
3. Weatherall MW. Chronic daily headache. Pract Neurol 7(4):212-221; 2007.
4. Alemdar M, Selekler HM, Efendi H. A non-traumatic interhemispheric subdural haematoma: presented with headache as the sole complaint. J Headache Pain 2005; 6(1): 48-50.
5. Rajshekhar V. Severe episodic headache as the sole presenting ictal event in patients with a solitary cysticercus granuloma. Acta Neurol Scand 2000; 102(1): 44-46.
6. Canu C, Barinagarrementeria F. Cerebral venous thrombosis associated with pregnancy and puerperium: a review of 67 cases. Stroke 1993; 24: 1880-1884.
7. Lipton RB, Lowenkopf DT, Bajwa ZH, Leckie RS, Ribeiro S, Newman LC, Greenberg MA. Cardiac cephalgia: A treatable form of exertional headache. Neurology 1997; 49: 813-816.
8. Famularo G, Polchi S, Paolo Tarroni P. Headache as a presenting symptom of acute myocardial infarction. Headache 2002; 42: 1025-1028.
9. Grace A, Horgan J, Breathnach K, Staunton H. Anginal headache and its basis. Cephalgia 1997; 17: 195-196.
10. Weisberg LA. Asymptomatic enlargement of the sella turcica. Arch Neurol 1975; 32(7): 483-485.