Misdiagnosed Odontogenic Headache: Case Report and Review of Literature

Atul Dwivedi[1], Shweta Shukla Dwivedi[2], SuZhen Hong[3], Yu xin[4], Xiao Ming Qiu[5]

ABSTRACT

Introduction headache is one of the most common symptom and collectively headache is among the most common symptom of the neurodisorders, however there might be several reasons behind different sort of headache, headache can also be classified as

1. Odontogenic headache
2. Non odontogenic headache

Case report: Here we are going to discuss an unusual case report of headache. A middle aged Asian male presented with headache in the department of cardiology with a history of migraine of 20 years ago and he was suspecting the headache because of high bp 90/ 160. He was prescribed with Ace inhibitors. Still he was suffering from daily persistent headache with pain intensity 4/10. Subsequently he was suggested to see the neurologist. the patient was without any red flag sign, head and neck examination was normal. This headache was always worsen in the evening and night hours, after taking calcium channel blockers headache was relieved for several hours but again started in the early morning hours. This was wakening headache. This headache was also relieved after maintaining cross ventilation in the room. Headache was unilateral, never crossed the midline, intensity varied from mild to severe shooting pain, worsened by hot and cold winds directly or indirectly on the head. Patient also had acupressure therapy on yin tang and tai-yang acupoints but he can't get a stable relief.
Conclusion: Careful and thorough history taking skills are the key points for diagnosing exact cause and origin of a headache. It may reduce useless financial burden in the stable treatment of headache.

Keywords: Migraine, Headache, Acute Pulpitis

INTRODUCTION

Almost 95 % of general population suffers from headache at some stage of their lives with One year of prevalence in nearly one in two adults.[1]

These Headaches might affect individual's quality of life, which is very fussy to quantify with 75% patients reporting functional disability. Around 50% migraine patients need family and friends support and got vast impact on their social life.[2]

At some instance headache is quite confusing and the practitioner can't resolve the headache in the lack of accurate and careful history taking skills, in that case we need multidisciplinary care and consultation because headache is multi headed monster which has roots in several causes.

The world health organisation categorise headache among the top 10 causes of disability and in women among top 5.[3]

Here we report a unique case report where initial treatment from neurology and cardiology department failed to treat the headache.This case report intend to upgrade the knowledge of consultants differential diagnosis and definitive diagnosis on the basis careful history taking methods in order to make the medical treatment of headache time saving and cost effective.

CASE REPORT

A 38 years old Asian male presented to neurology outpatient department with history of migraine 20 years ago. It was daily persistent headache with pain intensity of 4/10. The nature of pain varied between dull ache to severe throbbing and pulsating headache in the temporal region, this headache continued till one and half month. There was no nausea or visual dysfunction. The headache was not relieved by analgesics.

The last episode of migraine was experienced 20 years back, which also varied in frequency and severity. At that time the patient was prescribed with tricyclics antidepressant for one year, NSAID (SOS) and steroid IV to relieve the severe migraine instantaneously.

The patient' s blood pressure was 90/ 160 that is slightly hypertensive. The patient don't have any medical history of ischemic heart disease, Diabetes mellitus, and COPD.

There was no clinical abnormality on routine head and neck examination. Detailed neurological examination was done but was not able to reveal any abnormality. There was no nausea, visual dysfunctions, photophobia. Valsalva

[1]Assistant Professor and Assistant Director, Department of Clinical and Basic Sciences, Medical college of Hubei Polytechnic University (HBPU), Core Team Member of Research Society of Hubei Polytechnic University.Ex- Research fellow Zhengzhou University, [2]Consultant Dental Surgeon, Jabalpur, [3]Assistant Professor and Director, Department of Basic Sciences, Medical college of HBPU, [4]Professor and Dean, Department of Basic Sciences, Medical college of Hubei Polytechnic University, [5]Director, Department of Radiology, Huangshi Central Hospital, Affiliated Hospital of Hubei Polytechnic University, Edong Health care Group.

Corresponding author: Dr Atul Dwivedi, Assistant Professor and Assistant Director, Department of Clinical and Basic Sciences, Medical College of Hubei Polytechnic University, Huangshi, Hubei Province, PR China, pin code -435003

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manoeuvre or postural changes did not aggravate the headache. At the same time patient was having history of tooth ache and sensitivity since 2 years.

This headache was always worsen in the evening and at night, after taking calcium channel blockers headache was relieved for several hours but again started in the early morning hours. Sometimes the early morning wakening pain was relieved by opening main door in order to maintain a cross ventilation in the room. Patient also tried acupressure therapy, he often got short time relief by pressing yin tang acupoints but unfortunately acupressure can't give a stable relief.

This scenario was going on for one and half month then suddenly One day the patient started feeling lower jaw & myofacial pain and he went to the dentist because he was having sensitivity in lower sixth molar, as soon as the dentist opened the canal of sensitive tooth, the headache stopped itself suddenly at first sitting. So this throbbing, pulsatile and early morning wakening cephalgia was a case of odontogenic headache and diagnosis was acute pulpitis.

DISCUSSION

According to international headache society headache are of two types1. Primary 2. Secondary that is primary are without organic cause and secondary with a known cause.

Migraine, cluster headache and Tension headache come under category of primary headache, for the diagnosis of these headache neuroimaging is not necessary, only clinical assessment is sufficient.[4] Garjesh etal again proved that Woman suffers 2 to 3 times more from primary headache especially migraine than male.[5]

This may be because of hormonal factors. The link between female sex harmonies and Migraine is well proved, migraine has also the strong correlation with pregnancy, OCP, menopause, menstruation and HRT.[6]

Most common chief complaint in a dental clinic is orofacial pain,[7] but In the early stage the orofacial pain was absent in our case only severe headache was the chief complaint there. Few days later lower jaw pain starts.

Headache are most commonly concerned with cranium. However, Sometimes may concerned with orofacial region thus often mistaken as odontogenic pain.[8]

But in our case odontogenic etiology was misdiagnosed because of vague symptoms, lack of careful history taking skills in outpatient department, and the patient was presented with overlapping signs and symptoms, moreover unilateral myofacial pain and lower jaw pain started in later stages.

Clark says Headache and toothache both transmit through largest sensory cranial nerve (trigeminal nerve) which supplies teeth, jaw, scalp, and external face and most of intracranial structures.

Whenever there is pain in one branch, it can potentially affect the other branches at the same time and when this pain becomes chronic, it is more likely to activate a vicious cycle of events that easily lead to headache. The people with headache, continuous toothache are likely to have migraine attacks.[9]

In our case there was no neurological symptoms, No flag signs, No CWC (clinical warning criterion), but patient was hypertensive. So we suspect this headache might be because of hypertension and prescribed ACE inhibitors, However the patient 's headache was not relieved. At last when lower jaw pain and myofacial pain started, the patient self diagnosed an. Odontogenic reason for continuous and sustained headache, and he went for endodontic treatment for lower right first mandibular molar and as soon as the the dentist started root canal treatment, the headache was relived stably on the same day.

CONCLUSION

A prompt and thorough analysis of patients case history is important for the vague type of headache.The practitioners should emphasise on skills of taking history, so that the exact diagnosis can be made without puzzling a patient.

Moreover all practitioners are advised to have thorough knowledge of complex mechanism of headache and relation between headache and dental pain. Dental practitioner should also know the differential diagnosis of dental pain so that headache can be treated without delay and there will be less financial burden for headache treatment & diagnostic procedures.

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