

Nummular headache

Tissa Wijeratne¹, Dilani Wijeratne²

Sri Lanka Journal of Neurology, 2013, 2, 23-24

Introduction

Nummular headache (NH) was first described in 2002 by Pareja et al¹. The term “nummular” was taken from the Latin “nummus” meaning ‘coin’. Nummular headache is also known as coin shaped cephalgia. In 2004, NH was included in the research diagnostic criteria of the International Classification of Headache Disorders, 2nd edition (ICHD- 2)². The diagnostic criteria for NH were updated in the current ICH 3 beta classification, which is in press (available on line)³. We present a 26-year-old woman who presented to us with the classic features of nummular headache and review the literature in this rare primary headache disorder.

Case history

A 26-year right-handed woman started suffering from focal head pain since January 2013. The painful area was perfectly circular with the diameter of about five cm in the right parietal region. She described the pain as moderately severe, pressure like pain which was continuous with the intensity fluctuating^{2,3}. The pain was not specifically worse in the morning. There was no exacerbation with laughing, coughing, sneezing or straining. There were no positive constitutional symptoms in her history. Her clinical neurological examination was unremarkable. MRI, MRV, MRA brain was unremarkable. Her blood tests, electrocardiography, psychiatric tests (assessed by the second author) were unremarkable.

Clinical diagnosis of NH was made and detailed explanation was given to the patient. Her main concern of something sinister in her brain was alleviated through the diagnosis and reassurance. Simple analgesics (Ibuprofen 400 mg, prn) were used intermittently. Patient is stable with occasional symptoms in her right parietal region, which does not disturb her daily life at present.

Pareja et al described the first series of patients with NH in 2002. NH was described as a chronic, mild to moderate, pressure like pain in a circumscribed cranial area of approximately 2 to 6 cm diameter in his paper consisting of 13 patients. Head pain was exclusively affecting a circumscribed cranial area. Headache had a benign process with unknown origin¹.

NH presents a typical clinical picture of chronic pain that is exclusively felt in a round or oval area of the

surface of the head, usually 2-6 cm diameter. It is usual for the symptomatic area to remain unchanged in size and shape. Exact etiology of NH is not known. Pareja et al raised the possibility that NH is a headache probably arising from epicranial structures⁴.

In a series of 59 patients with NH, five patients had associated trophic changes on the site of the pain⁴. Four of these patients were women. They were 65, 50, 59 and 32 years of age respectively. The fifth patient with trophic changes was a man. He was 59 years old. All five patients had pain localized to the right parietal region. All five patients had sensory dysfunction such as hyperalgesia, paraesthesia on the site. Skin depression was the commonest trophic change, which was noted on all five patients. Three patients had hair loss on the site. Local temperature was increased in three patients. Color change was also observed on the same three patients. These three patients underwent skin biopsy with no specific changes seen. These findings suggest that the clinical spectrum of NH is likely to be a peripheral headache syndrome^{1, 4-7}.

In one hospital series, incidence of NH was 6.4/100,000 per year⁷. A further study 8 in general neurology outpatients, 1.25% of all patients with headaches had NH. In a large series of 72 patients with NH from Spain showed female predominance with a mean age of onset around 40 years with a slight occipital predominance^{9,10}. NH seems to be a local pain disorder with peripheral sensitization localized to the site. Sensory symptoms and signs such as spontaneous pain, paroxysmal pain, trophic changes, evoked pain has been described in NH¹¹.

In many patients with NH a simple explanation of the benign nature of the headache is adequate with no specific treatment. Some patients may need standard dose of simple analgesics such as in our case we described here.

There are patients with NH with inadequate response to analgesics who may benefit from preventative therapy. Large case series from Spain confirmed 58% of their series were prescribed with a preventative medication¹⁰. Gabapentin was the most prescribed drug in this series. There are no clear guidelines on use of preventative therapy in NH.

Botulinum toxin type A has been used in small number of cases with successful outcome^{12,13}. Carba-

¹Department of Neurology, Western Hospital and University of Melbourne, Footscray, Victoria 3011, Australia, ²Department of Psychiatry, Adult Inpatient Unit, Austin Hospital, Heidelberg, Victoria, Australia.

mazepine, Indomethacin, Topiramate have also been used with successful results in some patients in the past^{11,14,15}.

Table 1. IHS diagnostic criteria for nummular headache

Previously used term:

Coin- shaped headache

Description

Pain is of a highly variable duration, but often chronic, in a small circumscribed area of the scalp in the absence of structural lesion.

Diagnostic criteria

- A. Continuous or intermittent head pain fulfilling criterion B
- B. Felt exclusively in an area of scalp, with all of the following four characteristics
 1. Sharply contoured
 2. Fixed in size and shape
 3. Round or elliptical
 4. 1-6 cm in diameter
- C. Not better accounted for by another ICHD-3 diagnosis

Comments

The painful area may be localized in any part of the scalp, but usually in the parietal region. Rarely 4.8 *Nummular headache* is bi- or multifocal, each symptomatic area retaining all the characteristics of nummular headache. Pain intensity is generally mild to moderate, but occasionally severe. Superimposed on the background pain, spontaneous or triggered exacerbation may occur. Duration highly variable: in up to 75% of published cases, the disorder has been chronic (present for longer than 3 months), but cases have also been described with duration of seconds, minutes, hours or days.

The affected area commonly shows variable combination of hypaesthesia, dysaesthesia, paraesthesia, allodynia and /or tenderness.

Other causes, in particular structural and dermatological lesions, must be excluded by history, physical examination and investigation

(With permission from: International Headache Society. Headache Classification Committee of the International Headache Society. The International Classification of Headache Disorders, 3rd edition (beta version). *Cephalalgia*: an international journal of headache 2013;33:629-808.)

References

1. Pareja JA, Caminero AB, Serra J, et al. Nummular headache: a coin-shaped cephalgia. *Neurology* 2002; **58**: 1678-9.
2. Headache Classification Subcommittee of the International Headache S. The International Classification of Headache Disorders: 2nd edition. *Cephalalgia*. An International Journal of Headache 2004; **1**: 9-160.
3. Headache Classification Committee of the International Headache S. The International Classification of Headache Disorders, 3rd edition (beta version). *Cephalalgia*. An International Journal of Headache 2013; **33**: 629-808.
4. Pareja JA, Cuadrado ML, Fernandez-de-las Penas C, Nieto C, Sols M, Pinedo F. Nummular headache with trophic changes inside the painful area. *Cephalalgia*. An International Journal of Headache 2008; **28**: 186-90.
5. Pareja JA, Montojo T, Alvarez M. Nummular headache update. *Current Neurology and Neuroscience Reports* 2012; **12**: 118-124.
6. Pareja JA, Pareja J. Nummular headache: diagnosis and treatment. *Expert Review of Neurotherapeutics* 2003; **3**: 289-92.
7. Pareja JA, Pareja J, Barriga FJ, et al. Nummular headache: a prospective series of 14 new cases. *Headache* 2004; **44**: 611-614.
8. Guerrero AL. Representation of the nummular headache in general consultation in neurology. *Neurologia* 2008; **23**: 474.
9. Grosberg BM, Solomon S, Lipton RB. Nummular headache. *Current Pain and Headache Reports* 2007; **11**: 310-12.
10. Guerrero AL, Cortijo E, Herrero-Velazquez S, et al. Nummular headache with and without exacerbations. Comparative characteristics in a series of 72 patients. *Cephalalgia*. An International Journal of Headache 2012; **32**: 649-53.
11. Ruscheweyh R, Buchheister A, Gregor N, Jung A, Evers S. Nummular headache: six new cases and lancinating pain attacks as possible manifestation. *Cephalalgia*. An International Journal of Headache 2010; **30**: 249-53.
12. Alvaro LC, Garcia JM, Areitio E. Nummular headache: a series with symptomatic and primary cases. *Cephalalgia*. An International Journal of Headache 2009; **29**: 379-83.
13. Mathew NT, Kailasam J, Meadors L. Botulinum toxin type A for the treatment of nummular headache: four case studies. *Headache* 2008; **48**: 442-7.
14. Moon J, Ahmed K, Garza I. Case series of sixteen patients with nummular headache. *Cephalalgia*. An International Journal of Headache 2010; **30**: 1527-30.
15. Baldacci F, Nuti A, Lucetti C, Borelli P, Bonuccelli U. Nummular headache dramatically responsive to indomethacin. *Cephalalgia*. An International Journal of Headache 2010; **30**: 1151-2.