

Cluster Headache and Mucocele: A First Case Report

Mariangela Panebianco^{1,2*}, Andrea Giorgetti¹, Maria Vittoria Calloni¹, Francesco Muscia¹, Grazia Maria Nuzzaco¹, Serena Leva¹, Luca Chiveri¹, Lucia Politini¹, Emilio Vecchio¹ and Patrizia Perrone¹

¹Department of Molecular and Clinical Pharmacology, Institute of Translational Medicine, Clinical Sciences Centre for Research and Education, UK

²Neurology Department, Stroke Unit, Hospital Legnano, Asst Ovest Milanese, Italy

Abstract

Cluster headache (CH) is excruciating attack of pain in one side of the head, often felt around the eye. It occurs 1 in 500-1000 people, is more common in men and tend to develop in people over the age of 20.

Keywords: Cluster headache; Mucocele; Maxillaris sinus

Introduction

Cluster headache (CH) is excruciating attack of pain in one side of the head, often felt around the eye. It occurs 1 in 500-1000 people, is more common in men and tend to develop in people over the age of 20. It occurs in recurrent "bouts" over several weeks followed by headache-free periods that often last for months or years. It is not clear exactly what causes CH but some cases understanding a genetic predisposition. We report a 44-year-old man who presented symptomatic CH caused by a mucocele of the maxillaris sinus.

Case Report

A 44-year-old previously healthy male was admitted to our clinic with sudden sever pain, described as a sharp, burning sensation on right side of the head. The pain was typically felt around the eye, temple and face with associated symptoms such as smaller pupil in right eye, runny nostril in the same side, and sweaty face. Patient felt restless and agitated during the attack because the pain was very intense. Other two attacks were reported and lasted around 1 hour. Negative family history for cluster headache and/or migraine. CT brain, CT Angiography and ophthalmology examination were normal. In our department, he started oxygen therapy through a mask that relieved the pain within around 30 minutes and also treatment with verapamil 160 mg a day. After two days without symptoms he reported another attack with the

same features. We decided to take MRI scan of the brain that showed hysointense lesion with a ring calcified on T1-weighted of 2.5 cm in diameter, and low enhancement on T2-weighted inside the maxillaris sinus. Surgical removal of the mucocele led to complete relief of cluster headache within 3 weeks.

Discussion

Mucocele is a benign, cystic lesion lined by respiratory epithelium. Headache induced by the presence of mucocele is directly related to mechanical pressure on the sinus anatomy, such as expansion, infection and erosion of the sinus wall [1,2]. Furthermore, headache is associated with inflammatory cytokines, such as IL-1, IL-6, TNF alpha, and PGE2 [3]. Since the patient had typical symptoms of CH without others symptoms associated and medications were effective, the mucocele was not recognized. Only after an MRI, was correct diagnosis made. We conclude that the association between headache and mucocele of maxillaris sinus is extremely rare, but despite the effectiveness of medications, an MRI could be performed according clinical judgement to exclude symptomatic CH.

References

1. Leroux E, Ducros A (2008) Cluster headache. *Orphanet J Rare Dis* 3: 20.
2. Lee KE, Kim KS (2015) Headache induced by the sphenoid sinus mucocele. *BJORL* 81: 1.
3. Bruno PP, Carpino F, Carpino G, Zicari A (2007) An overview on immune system and migraine. *Eur Rev Med Pharmacol Sci* 1: 245-248.

*Corresponding author: Mariangela Panebianco, Department of Molecular and Clinical Pharmacology, Institute of Translational Medicine, Clinical Sciences Centre for Research and Education, UK, Tel: +44 (0)20 7589 5111; E-mail: m.panebianco@liverpool.ac.uk

Received September 08, 2016; Accepted November 15, 2016; Published November 21, 2016

Citation: Panebianco M, Giorgetti A, Calloni MV, Muscia F, Nuzzaco GM, et al. (2016) Cluster Headache and Mucocele: A First Case Report. *J Clin Case Rep* 6: 887. doi: [10.4172/2165-7920.1000887](https://doi.org/10.4172/2165-7920.1000887)

Copyright: © 2016 Panebianco M, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.