**Visual snow. From a symptom to a syndrome?**

**Nieve visual. ¿Del síntoma al síndrome?**

**Dear Sir:**

Visual snow (VS) is a symptom which consists of continuous black and white dots in the entire visual field, which simulates vision through a porous filter or, as many patients have reported, vision of a television screen which is turned on, but not connected to the aerial, also known as white noise (Figs. 1 and 2). This continuous symptom of VS, which may persist even for several years, increases under low light conditions, producing severe discomfort and a serious disability which interfere with the patients’ daily living and lead to lots of consultations with ophthalmologists, neurologists, psychiatrists and psychologists without getting any diagnosis or specific treatments.

VS is mainly associated with migraines, either with or without aura, and even as persistent migraine aura, although at present it is considered an independent entity which appears as an isolated symptom or together with other visual symptoms such as photopsia, palinopsia or spotted vision. The prevalence of this symptom is unknown; however, more and more patients are being diagnosed with VS, regardless of migraine. Showing a male predominance (ratio 1:2.2), it tends to appear in young adults, although cases have been described in childhood. Despite its unknown aetiology, its association with migraine suggests a similar pathophysiology between both processes.

At present, several authors are considering this symptom as an independent entity from migraine, since it tends to last for years, it generally shows no remittance and does not respond to treatments used for migraine prevention either. In the 54th Annual Meeting of the American Academy of Neurology, Schankin presented a work about 120 patients with VS. Among the outcomes, he points out that 33% of patients showed headache the previous week and 10%, aura symptoms. Among the findings, it is also highlighted that in most patients, VS was associated with other additional visual symptoms, which is why it could be considered an independent clinical syndrome with four specific diagnostic criteria that have to be present for the diagnosis of VS (Table 1).

As far as VS treatment is concerned, in most cases drugs used for migraine prevention have been prescribed, such as tricyclic antidepressants, calcium channel blockers, beta blockers or different analgesics, with little success in this clinical picture. In the work presented by Schankin, 92% of patients did not respond to prescribed medication. Therefore, a specific and customised follow-up is required for each patient, with therapies adapted to each one.

Finally, VS is a pathology which has to be known by ophthalmologists and neurologists. The possibility of conveying a sense of tranquility to our patients by knowing such pathology is essential for the multidisciplinary approach thereof. Although its prevalence and aetiology are unknown and preventive treatments are not very effective, the diagnosis of VS may relieve our patients’ distress, thus preventing several visits to other specialists which tend to take place in the search of a solution to this medical problem. New studies are necessary in order to know the prevalence, aetiology and treatment of VS, which could be a significant issue in the future.

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**Fig. 1 – Image of Torre de Madrid [Tower of Madrid].**

**Fig. 2 – Simulation of snow vision in the above image of Torre de Madrid.**

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Table 1 – Diagnostic criteria of visual snow suggested by Schankin.

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<td><strong>1.</strong></td>
<td>Continuous and dynamic visual snow</td>
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<td><strong>2.</strong></td>
<td>At least one additional symptom of:</td>
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<td></td>
<td>Palinopsia</td>
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<td>Photophobia</td>
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<td>Impaired night vision</td>
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<td>Entopic phenomena</td>
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<td><strong>3.</strong></td>
<td>Symptoms are not consistent with typical migraine with aura</td>
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<td><strong>4.</strong></td>
<td>Symptoms are not attributable to any other disorder (ophthalmological, drug abuse, etc.)</td>
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characteristics of this pathology which may become a very disabling condition.

REFERENCES


2. Schankin CJ, Maniyar FH, Goadsby PJ. Paper presented at: 54th annual scientific meeting of the American Headache Society, Los Angeles, CA Field-testing the criteria for visual snow (positive persistent visual disturbance); 2012.


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