

Visual snow syndrome

A clinical and phenotypical description of 1,100 cases

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Cite as: *Neurology*® 2020;94:e564-e574. doi:10.1212/WNL.0000000000008909

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Study objective and summary result

This study aimed to test the current criteria for visual snow and describe its common presentation. The results support the validity of the current criteria.

What is known and what this paper adds

Visual snow is a recently-described neurologic condition in which patients perceive uncountable tiny dots over the entire visual field. This investigation provides confirmation of the clinical characteristics that were originally reported.

Participants and setting

The investigators surveyed 1,104 patients with self-assessed visual snow. The survey was advertised through the website of a patient support group and self-selected participants provided data between April 2016 and May 2018. Most survey respondents reported being from North America or Europe.

Design, size, and duration

The survey included questions about the presence and severity of visual snow and various common comorbidities that are regarded as part of the visual snow syndrome (VSS). VSS was defined based on criteria proposed in 2014. Latent class analysis was used to test for possible endophenotypes of visual snow.

Primary outcome measures

The primary outcomes were the characteristics of visual snow reported by the survey respondents.

Main results and the role of chance

Symptoms consistent with complete VSS were reported by 1,061 respondents (96.1%). Visual snow usually started early in life, and 40% of the patients reported experiencing visual snow for as long as they could remember. The most commonly reported form of static was black and white, and the most commonly reported additional symptoms were floaters, afterimages, and photophobia. Latent class analysis showed

Table Visual snow types reported by the survey respondents

Type of static	Percentage (95% confidence interval) reporting a given type among patients with:	
	VSS	Visual snow without the syndrome
Black and white	58% (54%–60%)	40% (26%–54%)
Colored	44% (41%–47%)	26% (15%–40%)
Flashing	47% (44%–50%)	26% (15%–40%)
Transparent	53% (49%–55%)	35% (22%–50%)

that visual snow did not present with specific clinical endophenotypes. The severity of visual snow could be assessed based on the number of visual symptoms reported. Migraine and tinnitus were commonly reported.

Bias, confounding, and other reasons for caution

The present study's reliance on recruitment through a patient support group might have biased the respondent sample in favor of patients with severe symptoms.

Generalizability to other populations

Online recruitment allowed for a geographically diverse respondent sample that favors the generalizability of the results.

Study funding/potential competing interests

This study was funded by the Eye On Vision Foundation, the Visual Snow Initiative, and the Biomedical Research Centre at South London and Maudsley. The authors report no competing interests. Go to Neurology.org/N for full disclosures.

A draft of the short-form article was written by M. Dalefield, a writer with Editage, a division of Cactus Communications. The corresponding author(s) of the full-length article and the journal editors edited and approved the final version.

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Neurology 2020;94:e564-e574 Published Online before print January 15, 2020

DOI 10.1212/WNL.00000000000008909

This information is current as of January 15, 2020

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