

Clinical-Medical Image

## Snowman Sign: A Typical Sign of Intra and Suprasellar Adenoma

Hatim Essaber\*

Department of Central Radiology, CHU Ibn Sina, Rabat, Morocco

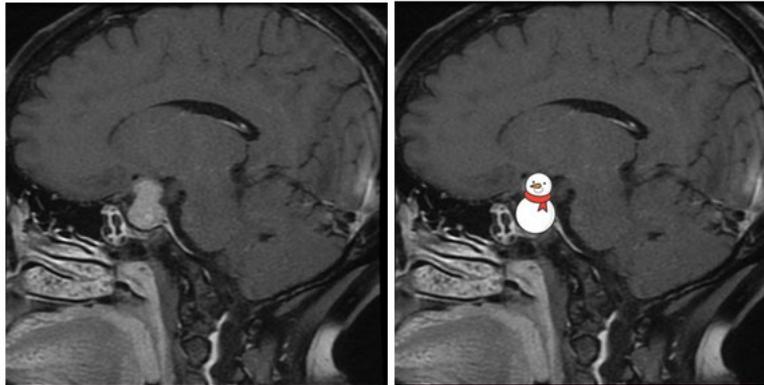


Figure 1: MRI of the pituitary gland on sagittal T1 with gadolinium demonstrating Intra et suprasellar adenoma “snowman sign”.

### Clinical-Medical Image

The snowman sign is often observed in quotidian practice and has traditionally been used by neurosurgeons to describe the intrasellar masse that extends beyond it. The arrival of new imaging technologies has made it more possible to spread the utility of this finding to the radiological field.

It is difficult to identify the first author who described it as a neuroradiological finding. However, in 1983 Pásztor, a Hungarian neurosurgeon, published “Trans-sphenoidal Surgery for suprasellar pituitary adenomas” in the journal *Acta Neuroquirurgica*, identifying this finding in patients with extensive pituitary macroadenomas as the dumbbell sign.

In the 1990s, Anne Osborn published the first issue of one of the most important manuscripts on Neuroradiology. There, she mentioned the sign as an image “in eight” and associated it with large macroadenomas. In later editions, it appears the current nomination: snowman sign.

The adenomas originated in the pituitary gland, inside the sella turcica, but if they grow they expand beyond it, then represent a suprasellar position and displaces the tentorium and sellar diaphragm cranially and giving the snowman sign (Figure 1), or number 8 or a dumbbell sign.

It should be noted that this finding is not specific to this pathology, but can be detected in other pituitary diseases, such as lymphocytic hypophysitis, meningioma of the sellar region, Rathke cysts or craniopharyngioma.

In the same context, Choi et al. conducted a retrospective study in patients diagnosed with pituitary adenoma, craniopharyngioma and Rathke cysts cases. Based on pathology, they analyzed the imaging features of each pathology on pituitary MRI. According to their results, a snowman-shaped lesion, solid features, and homogeneous post-contrast enhancement are the most common findings compared to the other lesions (p lesion of 0.017) then Song et al. extended the same study and corroborated these data.

Pituitary adenomas are a common cause of endocrine function disorders and visual field disturbances. For this reason, early and correct diagnosis is of great importance in clinical practice.

According to the literature consulted, the snowman sign is not specific for pituitary macroadenoma, but if certain radiological determinations are added, it can be useful to establish the diagnosis at a high rate.

**Keywords:** Adenoma; snowman; Sign

### Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### References

1. Harfouch RM (2022) Antiviral Effects of Propolis against SARS-COV 2. *Int J Clin Med Imaging* 9:809.

**Received:** 06 January, 2022, Manuscript No. *ijcmi-22-54449*; **Editor assigned:** 07 January, 2022, PreQC No. *P-54449*; **Reviewed:** 11 January, 2022, QC No. *Q-54449*; **Revised:** 16 January, 2022, Manuscript No. *R-54449*; **Published:** 21 January, 2022, DOI: [10.4172/2376-0249.1000807](https://doi.org/10.4172/2376-0249.1000807)

\*Corresponding author: Hatim Essaber, Department of Central Radiology, CHU Ibn Sina, Rabat, Morocco, Tel: +212660366488; E-mail: [Essaber.hatim@gmail.com](mailto:Essaber.hatim@gmail.com)

**Citation:** Essaber H (2022) Snowman Sign: A Typical Sign of Intra and Suprasellar Adenoma. *Int J Clin Med Imaging* 9:807.

**Copyright:** © 2022 Essaber H. 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.