

## LETTERS

## Venous pulsatile tinnitus due to pseudotumor cerebri syndrome in a young morbid obese female.

Dear editor

Venous pulsatile tinnitus (PT) can originate from conditions causing increased intracranial pressure<sup>1</sup>.

A 19-year-old morbid overweight female [Body Mass Index (BMI): 43.25, height 1.7 m, weight: 125 Kgr], was presented to our hospital due to bilateral PT, headaches, neck pain, slight imbalance, and visual disturbances. Patient's symptoms had appeared three months before and gradually deteriorated.

On admission, neurological examination revealed papilledema in both eyes.

Ophthalmological evaluation revealed visual acuity 1/20, bilaterally. A visual field test showed scotomas bilaterally.

Auscultation of the neck, revealed objective PT bilaterally. Application of light digital pressure over the ipsilateral internal jugular vein of the patient resulted in immediate cessation of PT and hearing improvement. Hearing screening showed a low-frequency sensorineural hearing loss (SNHL) bilaterally.

The patient received a magnetic resonance imaging, MR angiography and MR venography of the head, which were normal, a lumbar puncture which revealed considerable intracranial pressure raise (626 mmH<sub>2</sub>O), and laboratory examinations which were normal too.

Concerning this pressure raise, morbid obesity was the only causation that was detected, leading us to the conclusive diagnosis of pseudotumor cerebri syndrome (PTC)<sup>1</sup>.

For the management of the syndrome the patient went on a diet and received medication treatment with oral administration of acetazolamide. Visual field test was used as a strict criterion of disease progress.

After two weeks time of medication and dietetic measures, the patient's vision, initially became stable and afterwards improved gradually. Similarly headache, neck pain, PT and SNHL, (pseudosensorineural hearing loss secondary to the masking effect of the PT; should not be confused with the hearing loss seen in Meniere's disease) gradually subsided<sup>2</sup>.

Within a month visual acuity was on the right eye 4/10 and on the left eye 1/10 and the patient experienced complete resolution of PT and headache.

After one year of diet the patient managed to reduce her BWI of 43.25 to 32.87, losing 30 Kgr, while her vision almost restored, (visual acuity 8/10 bilaterally).

PTC syndrome is by far the most common etiology of venous PT in young and obese female patients<sup>1</sup>.

This case presentation is of particular interest to general practitioners, ENT doctors, ophthalmologists and neurologists and we believe that is the first report adequately documented concerning PT of venous origin secondary to PTC syndrome owing to morbid obesity in Greek literature.

### References

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### Conflict of interest

None declared.

Kastanioudakis I<sup>1</sup>, Konitsiotis S<sup>2</sup>, Asproudis I<sup>3</sup>, Ziavra N<sup>4</sup>

<sup>1</sup>Department of Otorhinolaryngology, University of Ioannina

<sup>2</sup>Department of Neurology, University of Ioannina

<sup>3</sup>Department of Ophthalmology, University of Ioannina

<sup>4</sup>Speech and Language Therapy Department, TEI of Epirus  
Ioannina, Greece

**Corresponding author:** Kastanioudakis Ioannis, N. Dosiou 8, 45333, Ioannina Greece, tel: +306944354941, e-mail: kastan8@otenet.gr