

Echographic Comparison of Optic Nerve Sheath Diameter between Both Eyes

Sir,

We read with great interest the article by Yanamandra *et al.*^[1] concerning the comparison of optic nerve sheath diameter (ONSD) between both eyes.

We would like to congratulate the authors for their interesting paper. This is a very exciting topic because to prove that optic nerve diameters are similar in both eyes, supports the possibility not only to detect an increase in the intracranial pressure (ICP) but also to diagnose an optic neuritis or an optic nerve glioma that can show a similar picture, making the comparison between the two eyes mandatory.

The authors correctly stated that there are some limitations to the study; however, in our opinion, there are some other limitations that need to be listed.

If we understood correctly, the measurements of ONSD was done by a single investigator (primary author) who was not blinded to the diagnosis of high-altitude pulmonary edema (HAPE). A random sample of 10 optic nerve sheath ultrasonography (ONSU) out of every 100 ONSU conducted by the primary author was counter checked by the radiologist independently, who was blinded to the primary diagnosis and the earlier measurements but does not seem that they were blinded regarding the measurements in both eyes.

As it was discussed in several reports, the real problem in the optic nerve measurements is the use of the B scan.^[2-6] This technique has some problem in measuring orbital structures due to the so-called blooming effect. Such effect, that can be less important when we deal with large lesions, can be misleading when we expect that a difference <0.5 mm can make a difference, as it happens in the measurements of the optic nerve. This effect will make very difficult to get objective acquisition and measurements of the pictures. For this reason, we would like to suggest the authors to utilize for future studies, the so-called standardized A scan that can be much more precise even if it requires some skill and is a little bit more difficult to perform.^[7]

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Conflicts of interest

There are no conflicts of interest.

Maddalena De Bernardo, Ilaria De Pascale

Department of Medicine Surgery and Dentistry,
Scuola Medica Salernitana, University of Salerno,
Salerno, Italy

Address for correspondence: Dr. Maddalena De Bernardo,
Department of Medicine Surgery and Dentistry,
Scuola Medica Salernitana, University of Salerno,
Via S. Allende, 84081 Baronissi, Salerno, Italy.
E-mail: mdebernardo@unisa.it

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