Case Study 29
Optic Nerves in Pseudotumor Cerebri

AC is a 25-year-old woman with a history of headaches that had worsened in the past few months. She was moderately obese but otherwise had a normal medical history. Examination revealed moderate optic disc elevation bilaterally. An MRI scan was reported as normal. She refused lumbar puncture and was therefore referred for echography to quantitate the optic nerve. A-scan measured the sheath-to-sheath diameter of the right optic nerve to be 4.5 mm and the left as 4.8 mm in primary gaze. The right nerve was remeasured in abduction to be 3.5 mm and the left to be 3.6 mm (Fig. 1). She was diagnosed with pseudotumor cerebri on this basis and begun on oral Diamox and a program of weight reduction.

Thickening of the nerve from solid pathological processes, such as optic nerve glioma, meningioma, or cellular infiltration as in lymphoma, results in unchanged sheath-to-sheath measurements on the 30° test.

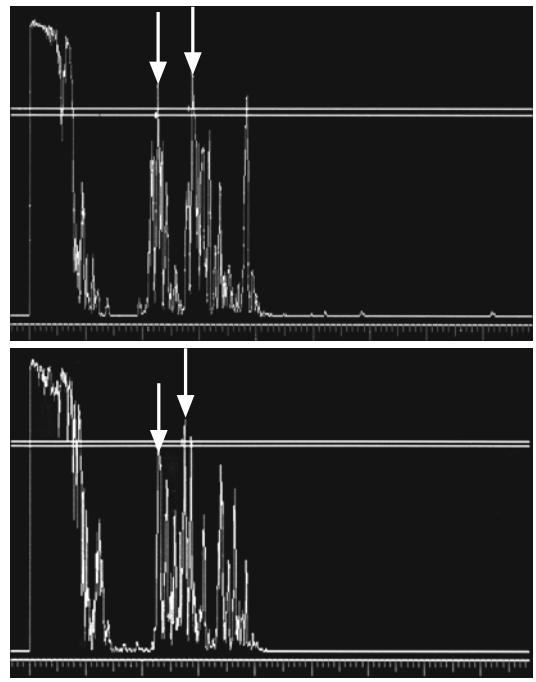

FIG. 1 *Top*: A-scan of thickened optic nerve sheath in pseudotumor cerebri (*vertical arrows*). *Bottom*: after 30° test (*vertical arrows*)

R.P. Harrie, C.J. Kendall, *Clinical Ophthalmic Echography*,
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