## Case Study 10 Dacryoadenitis

MB is a 25-year-old woman who complained of intermittent aching pain around her left eye over a period of several weeks. Examination was unremarkable with only slight tenderness to palpation of the left superior orbit. A CT scan had been ordered by her primary care doctor and was read as normal by the radiologist. A-scan was performed by the ophthalmologist and demonstrated thickening of the left lacrimal gland of 15.45 mm compared to a normal measurement of 13.2 mm for the right gland. Internal reflectivity was medium reflective compared to the higher reflectivity of the right lacrimal gland (Fig. 1). These findings were most consistent with a low-grade dacryoadenitis, and she was given a 2-week course of oral antibiotics with resolution of her symptoms. Remeasurement by A-scan showed reduction in size of the gland to 14.3 mm.

Echography is very useful in the evaluation of the optic nerve. The blurred optic disc is encountered relatively commonly in the course of general ophthalmologic or optometric practice. Many normal discs are somewhat irregular in appearance with blurred margins, and this can cause concern for the practitioner about a possible intracranial process, especially in the setting of a patient complaining of headaches. Brain tumors are estimated to occur in a very small percentage of patients, about 1 in 10,000 [5]. However, in a litigatious society such as the USA, many of these individuals are referred for neuroimaging, which usually turns out to be normal. The wasted time and money spent in such defensive medicine is considerable and adds to the increasing health-care portion of the national budget.

The ability of A-scan to quantitate the optic nerve thickness is quite helpful in the evaluation of papilledema. It can assist in answering the question of whether an engorged optic nerve head is due

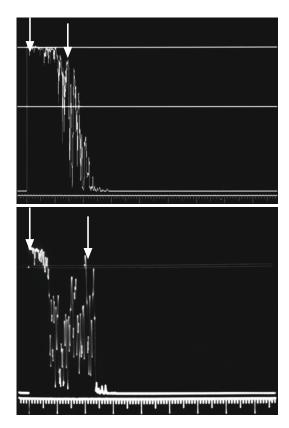


FIG. 1 *Top*: A-scan of right lacrimal gland (*vertical arrows* define the anterior and posterior surface of the gland). *Bottom*: A-scan of left lacrimal gland (*arrows*)

to increased fluid in the nerve sheath, as occurs in pseudotumor cerebri, or the result of solid thickening as seen in glioma, meningioma, or cellular infiltration of the nerve sheaths. B-scan gives a very accurate morphological view of the optic nerve head. It is extremely sensitive to calcium deposits such as optic disc drusen.