gradual increases in polymegathism and pleomorphism. — Thomas J. Liesegang

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A consensus statement was generated by the Optic Glioma Task Force outlining recommendations for the screening, follow-up, and treatment of optic pathway gliomas in children with neurofibromatosis 1 (NF1). In general, gliomas of the optic pathways are slowly growing, low-grade neoplasms, histologically identical to pilocytic astrocytomas. The incidence of symptomatic optic pathway glioma in NF1 is probably 1.5% to 7.5%, with a median age of presentation of 5 years. Once the tumors have come to medical attention, they infrequently progress. Because precocious puberty occurs in 39% of NF1 children with optic pathway gliomas, all young children with NF1, particularly those with optic tumors, should have annual assessments of growth and should be monitored for signs of premature sexual development. Management of the asymptomatic child with NF1 should include serial ophthalmologic examinations, but screening neuroimaging has not been shown to improve clinical outcome. Management of the NF1 child with a symptomatic optic pathway glioma should include serial MRI with contrast, serial ophthalmologic examinations, and monitoring for precocious puberty. Specific intervention depends on the location of the tumor (intraorbital vs chiasmal) and may include simple observation, surgery, radiotherapy and/or chemotherapy. Therapy is indicated for patients who develop progressive proptosis or progressive loss of vision, or, possibly, for the subset of patients who develop neuroradiographic progression. — Nancy J. Newman


The authors sought to determine the number and incidence of complications of transsphenoidal surgery performed by a cross-section of neurosurgeons in the United States and to ascertain the influence of the surgeon's experience with the procedure on the occurrence of these complications. Questionnaires regarding 14 specific complications of transsphenoidal surgery were mailed to 3,172 neurosurgeons, and the data reported were analyzed from the 958 respondents (82%) who reported performing the operation. The respondents were placed into three experience groups, based on the number of transsphenoidal operations performed (87.3% performed less than 200 operations; 9.7% reported 200 to 500 previous operations; 3% reported more than 500 operations). The mean operative mortality for all three groups was 0.9%. The overall incidence of anterior pituitary insufficiency was 19.4%; diabetes insipidus, 17.8%; cerebrospinal fluid fistulas, 3.9%; loss of vision, 1.8%; and ophthalmoplegia, 1.4%. An inverse relationship was found between the experience group and the likelihood of complications. For example, among the least experienced surgeons, loss of vision was reported in 2.4% of patients and ophthalmoplegia in 1.9% of patients; among the most experienced surgeons, loss of vision occurred in 0.5% of patients and ophthalmoplegia in 0.4% of patients. The authors conclude that transsphenoidal surgery seems to be a reasonably safe procedure, although a significant number of complications do occur. — Nancy J. Newman

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To determine the localizing associations of a quadrant visual field defect, the author retrospectively studied 71 patients with homonymous visual field defects primarily retained within the
superior or inferior quadrants. The responsible lesions were identified with neuroimaging techniques. Cerebrovascular disorders accounted for most of the lesions. The location (and frequency) of the 41 lesions causing inferior quadrantanopia were occipital lobe (76%), parietal lobe (22%), and temporal lobe (2%). Other localizing signs were associated with 6%, 89%, and 0% of lesions located in the occipital, parietal, and temporal lobes, respectively. The location (and frequency) of the 30 lesions causing superior quadrantanopias were occipital lobe (83%), parietal lobe (3%), and temporal lobe (13%). Other localizing signs were associated with 4%, 100%, and 0% of lesions located in the occipital, parietal, and temporal lobes, respectively. A patient with a neurologically isolated quadrantanopia is likely to have a lesion in the occipital lobe, and the cause is likely to be a stroke. — Nancy J. Newman


As part of the Optic Neuritis Treatment Trial, vision-specific quality-of-life data were collected from 382 (87%) of the 438 patients who had 6-month study visits. The purpose of this study was to determine the types of visual tasks in day-to-day living in which patients have difficulty and to compare the patients' subjective assessment of visual impairment with measurements of visual acuity, contrast sensitivity, mean deviation, and color vision. Although a substantial percentage of the patients (63%) indicated that vision had not recovered to normal in the affected eye, the reported visual deficits generally were mild. For most of the visual tasks of daily living, patients reported little or no problem. Among the 215 patients who perceived their vision at 6 months to be somewhat or much worse than it was before optic neuritis, 20% had normal results on none of the four visual function tests, 14% had normal results on one of the four tests, 23% had two of four, 23% had three of four, and 20% had normal results on all four. When patients reported visual symptoms, the four visual function tests often did not detect abnormality. This study supports previous reports that visual deficits are frequently perceived after optic neuritis, even when vision testing is normal. — Nancy J. Newman


Factor V Leiden is an inherited defect of hemostasis associated with an increased risk of venous thrombosis. To estimate the ethnic-specific prevalence rates of this risk factor, 4,047 American men and women free of myocardial infarction, stroke, or venous thrombosis participating in the Physicians' Health Study (PHS) or in the Women's Health Study (WHS) were surveyed. In 2,468 Caucasian Americans, carrier frequency of factor V Leiden was 5.27%. Carrier frequency was 2.21% in 407 Hispanic Americans, 1.23% in 650 African Americans, 0.45% in 442 Asian Americans, and 1.25% in 80 Native Americans. Thus, prevalence of factor V Leiden was less among minority subjects (P = .001). Carrier frequencies were similar in Caucasian men and women. These data have implications for clinicians considering whether to screen for factor V Leiden in high-risk groups such as those with prior venous thromboses or coexistent defects of anticoagulation and women at risk for postpartum thrombosis or seeking oral contraceptives. These data also have implications for ophthalmologists caring for patients, especially young patients, with retinal venous occlusive disease. — Nancy J. Newman

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