Sella Turcica


This new technique, recently described by Doppman et al in Radiology (1994), was shown to be useful in the intraoperative detection of adenomas associated with Cushing disease in 23 of 28 cases. A.D.E.


Two distinct pathologic subtypes of craniopharyngioma exist: the classic adamantinomatous type and a recently described papillary form that predominates in adults. The typical imaging appearance is a noncalcified, partially cystic mass that enhances peripherally and contains mural nodules. Based on this study, there were no differences between the two subtypes with respect to resectability, efficacy of radiation therapy, or overall survival. A.D.E.

Brain Tumors and Cysts


Authors analyzed the histology, recurrence rate, and complications in 19 cases of meningiomas involving the cavernous sinus. They conclude that subtotal resection followed by estrogen plus polyvinyl acetate is safe and effective treatment. J.S.R.


Twenty-four patients ranging in age from 3 to 68 years underwent stereotactic biopsy of mass lesions. In adult patients, brain stem lesions have a variety of pathologic findings and biopsy can provide adequate tissue diagnosis. Diagnosis of brain stem gliomas in children can often be made without submitting to the risk of surgery. J.S.R.

Interventional Neuroradiology

Debrun GM. Angiographic workup of a carotid cavernous sinus fistula (CCF); or, what information does the interventionalist need for treatment? Surg Neurol 1995;44:75–79

A prospective trial involving 53 patients, although in only 23 patients were spectra considered acceptable for analysis. Authors found decreased N-acetyl-aspartate in nearly all tumors, relatively normal creatine, and variable changes in choline and lactate. Seven spectra. J.S.R.

Inflammatory Disease


The authors evaluated 35 unselected patients with bacterial or fungal meningitis for study via transcranial Doppler to evaluate vascular stenoses. Fifty-one percent of these patients exhibited a stenosis of at least one basal cerebral artery between days 3 and 5. Stenoses were associated with a poor Glasgow Coma Scale score. The presence of focal cerebral signs was associated with an increased number of narrowed arteries. J.S.R.
Vascular Lesions and Malformations


Osler-Weber-Rendu, or Rendu-Osler-Weber, or hereditary hemorrhagic telangiectasia, is an amalgam of autosomal dominant diseases. Several problems bring the patients to the attention of neuroradiologists. Intractable epistaxis from telangiectasias of the nasal mucosa sometimes responds to transcatheter embolization. The patients also have arteriovenous malformations (in addition to telangiectasias) that affect the brain in two ways. Some patients have cerebral arteriovenous malformations (AVMs); some have pulmonary AVMs that cause brain abscesses and infarcts. This is a short, information-packed review of a challenging disorder.


Forty-one patients with AVMs were evaluated. In 71% of the cases duplex sonography revealed the malformations and their main feeders satisfactorily. Authors conclude that repeated measurements during stepwise embolization is easily done and noninvasive quantification of hemodynamic changes is possible, such as by crossfilling AVMs through contralateral anterior cerebral and anterior communicating arteries.


Surgery for incidental or unruptured anterior circulation aneurysms led to postoperative morbidity or mortality in a strictly controlled group of patients less than 70 years of age. Additionally, no rupture was observed in a nonsurgical group with aneurysms less than 4 mm in diameter during a mean follow-up period of 4.3 years.

Spine


There are previous reports of asymptomatic subjects studied with MR of the cervical spine and lumbar spine. The authors complete the survey by evaluating 60 patients with no history of thoracic or lumbar pain, 30 patients with low back pain only, and 18 patients with proved herniations of the thoracic disk. They found that 73% of the 90 asymptomatic subjects had positive findings, including herniation (37%) and bulging disk (53%).


Using their own indications for percutaneous endoscopic lumbar discectomy, the authors found suitable only 13 (4%) of 326 patients with L4-5 herniations who were candidates for the procedure. The number was reduced to eight of 326 after diskography, and of these eight, only three had excellent or good results. They conclude that percutaneous spinal surgery will produce no fundamental changes in the management of back pain and sciatica.