

## Selected Abstracts

Pages with reference to book, From 95 To 97

### **The Effects of Zero Population Growth on the Incidence of Cleft Lip and Palate in Western Australia. W.F. Brogan and B.P. Murphy. Med. J. Aust., 1978, 1:126.**

The total incidence of cleft lip, cleft palate and combinations of cleft lip and palate from 1958 to 1975 in Western Australia were studied. Six hundred and thirteen instances were found. There has been a significant decline over this period in the total incidence and in the incidence of cleft lip and palate in males. It is suggested these changes are related to changing patterns of fertility from simplicity and efficacy of birth control methods and abortion, and to the drop in the birth rate toward zero population growth. It is noted that cleft lip on the one hand and combinations of cleft lip and cleft palate on the other hand appear to behave independently, suggesting the possibility of separate etiologic factors.

**Ralph G. Naunton**

### **Fine-Needle Biopsy of the Thyroid Gland; a Cytohistological Comparison in Cases of Goiter. Lars-Berth Schnurer and Ake Widstrom. Ann. Otol. Rhinol. Laryngol., 1978, 87:224.**

Four hundred and six patients underwent thyroidectomy between 1964 and 1971. In 303 of these, fine needle biopsy was performed pre-operatively. These procedures were performed largely toward the end of the period of study, the increase paralleling the increase in the experience of the cytologists. The site of fine needle aspiration was determined on the basis of palpation and of <sup>131</sup>I scintigram.

Diagnosis on cytologic examination was classified as benign disease, adenoma or atypia, thyroiditis or malignant disease. Histologic results followed the same classification. Atypia was described as a situation where the needle yield was cellular and the cytologic detail aberrant, but not sufficiently convincing to be designated as malignant. The diagnosis on cytologic examination was later checked with the diagnosis from histologic findings after thyroidectomy.

Two hundred and eighty-four needle biopsies yielded material that was capable of being evaluated.

There was complete agreement between cytologic and histologic diagnoses in 264 of these patients, 93 per cent. In 28 patients with malignant disease, one tumor was diagnosed as benign and 12 were described as atypia on cytologic examination. The other 15 were correctly designated. No complications ensued from this form of investigation and its accuracy in diagnosing malignant disease made it possible for the surgeons to plan better the surgical treatment for patients with malignant disease.

**Thomas S. Reeve**

### **Surgery of the Superior Sagittal Sinus in Parasagittal Meningiomas. Joet Bonnal and Jacques Brotchi. J. Neurosurg., 1978, 48: 935.**

The management of 21 parasagittal meningiomas, three in the anterior, 14 in the middle third and four in the posterior third of the sagittal sinus, is described. Complete excision, with preservation of the venous flow in the sinus and its collateral veins, was attempted in each instance. Duraplasty and autogenous vein graft were preferred for repair of the sinus. Two cortical veins were sutured to a collateral branch of the autogenous vein graft. The technique of maintaining the vein graft open with a broad suture on a piece of the dura mater was described.

**A.H. Capanna**

### **Preliminary Evaluation of Cerebellar Stimulation by Double-Blind Stimulation and Biological Criteria in the Treatment of Epilepsy. John M. Van Buren, James H. Wood, John Oakley and Frederich Ham-brecht. J. Neurosurg., 1978, 48:407.**

Following the method and stimulation protocol of another study, five patients with severe chronic epilepsy were examined. They suffered both generalized and partial seizures. All patients were receiving combinations of drugs at therapeutic serum levels.

Two model E333 electrode arrays with four bipolar contacts each were placed on the superior surface of the cerebellum. The receivers were placed subcutaneously. The apparatus was checked in place. In three patients there was a subcutaneous leak of cerebrospinal fluid that required resuture. Double blind stimulation, was accomplished.

The parameters for evaluation were: cerebrospinal fluid levels of neurotransmitters nine to 16 months after implantation, central spinal excitatory state determined by checking H reflexes and tendon vibratory responses, seizure frequency by inpatient evaluation periods lasting four to six weeks and family evaluation of cerebellar stimulation, 24 to 29 months after implantation. The results seen were that the relation between the voltage setting and actual output was only approximate, no patient was rendered free of seizures, no definite changes were seen by comparison of preimplantation and postimplantation records on electroencephalogram, no evidence of change in intelligence and memory quotients was seen, positive family evaluation was made in all patients and decreased Purkinje's cell counts were seen in biopsy specimens.

There was lack of correlation between cerebellar stimulation and H reflex and tendon vibratory responses. The levels of norepinephrine were increased and the levels of gamma aminobutyric acid were unexpectedly reduced.

**Mario Nanes**

**Resolving Intracerebral Hematoma; Alteration of the "Ring Sign" with Steroids. D. Wayne Laster, Dixon M. Moody and Marshall R. Ball. Am. T. Roentgenol., 1978, 130:935.**

The ring enhancement seen on computerized tomographic scans is seen in many pathologic conditions. The cause of the enhancement has many, speculative, physiologic mechanisms. A series of 54 patients with spontaneous or traumatic intracerebral hematomas was studied retrospectively. In addition, eight patients were studied prospectively. The ring of contrast enhancement seen in resolving intracerebral hematomas was found to be modified with administration of steroids.

Six stages of resolution of hematoma were described. In Stage I, the hematoma is represented by a dense lesion without enhancement. In Stage II, there is gradually decreasing density with ring enhancement that can be modified by administration of steroids. In Stage III, the lesion is isodense, whereby the density of the hematoma equals the density of the brain, with enhancement that can be modified by steroids. In Stage IV, the lesion is lucent with enhancement that can be modified by steroids. In Stage V, the lesion is lucent with enhancement that is not subject to modification by administration of steroids. Stage VI represents the healed lesion in which residue may or may not be seen and no enhancement is present. Pathologic changes tend to indicate that the early ring is caused by breakdown of the blood-brain barrier which is responsive to therapy with steroids and that the later enhancement is caused by vascular granulation tissue which is not responsive to treatment with steroids.

**Roy A.E. Bakay**

**Growth and Development Processes in the Cerebrum Caused by Angiomatous Malformations in Childhood (Raumfordernde Prozesse im Grosshirn aufgrund angio-matoser Fehlbildungen in Kindesalter). P. Gruss. Z. Kinderchir, 1977, 22:1.**

Six children are described who suffered intracerebral hemorrhage caused by cerebral vascular lesions. Four patients bled from typical arteriovenous malformations, one patient bled from a so-called cryptic arteriovenous malformation and one bled from an intracerebral hemangio-blastoma. All children displayed the usual signs and symptoms of raised intracranial pressure. Two patients were moribund at the time they were seen by the neurosurgeon, and one patient died preoperatively. Each of the

remaining patients underwent craniotomy.

In three of the patients with a vascular malformation, removal of the surrounding hematoma and obliteration of the malformation were possible; each of these patients recovered fully. The one child with the exceptionally rare supra-tentorial hemangioblastoma likewise did well after total extirpation of the lesion. The patient harboring the cryptic arteriovenous malformation died postoperatively from cerebral edema. The relatively good prognosis postoperatively for recovery of children who have had significant spontaneous intracerebral hemorrhages is stressed.

**John R. Mawk.**