Selected Abstracts

Chiasmal Syndrome Caused by Arteriovenous Malformations. Patrick a Sibony, Simmons Lessell and Shirley Wray. Arch. Ophthalmol., 1982, 100: 438-442.
TWO INSTANCES of arteriovenoüs malformations which had produced chiasmal syndromes are reported upon. In one instance, an angiogram led to the diagnosis. In the second instance, a pulsating proptosis was noted prior to angiography. The literature was reviewed, and four patients with chiasmal syndrome caused by arterjovenous malformation were found. These patients are reviewed, and their clinical signs and symptoms are discussed briefly.
-Jose Kanshepolsky

The Clinical Relevance of 'CSF Viral Culture'; a Two-Year Experience with Aseptic Meningitis in Rochester, ny. Tasness Chonmaitree, Marilyn A.Menegus and Keith R. Powell. J.A.M.A. 1982, 247: 1843-1847.
THE PURPOSE of this report was twofold: to evaluate the role of viral isolation in patient management and to determine the context in which cerebrospinal fluid was sent for viral culture. The diagnosis of asceptic meningitis was defined as: cerebrospinal fluid pleocytosis, greater than ten white blood cells per cubic millimeter, or isolation of the virus from cerebrospinal fluid and absence of bacteria on direct smear or culture.
Cerebrospinal fluid of 390 patients was cultured. Of these patients, 264, 68 percent, did not have a discharge diagnosis of meningitis or meningoencephalitis, or both, while 126,32 per cent, did. Of these 126 patients, the causative agent was bacterial in 15 patients, 12 per cent, and viral in 11 1, 88 per cent. Of the 111 patients in whom a virus was suspected as the cause, no causative agent was identified in 61 patients, 55 per cent, while a specific pathogen was isolated in 50 patients, 45 per cent. Of the 50 patients in whom a virus was isolated, 36 patients, 72 per cent, had enterovirus isolated from the cerebrospinal fluid, while ten patients, 20 per cent, had cerebrospinal fluid pleocytosis and enterovirus isolated from one or more sources other than the cerebrospinal fluid.
The median age of patients in whom an enterovirus was believed to be the causative agent was 2.6 months, a range of seven days to 15 years. The median age of those patients in whom no virus could be isolated was 5.4 years, a range of 12 days to 63 years.. All patients in whom an enterovirus was isolated were symptomatic between June and November. Of the patients in whom no virus could be isolated, 77 per cent of these patients also had problems develop during this same time period.
By making the diagnosis of a viral as the cause of symptoms, the management, treatment and hospitalization of a substantial number of patients were directly affected. Thus, it is concluded that, once a decision for a viral culture has been made, every effort should be done to optimally collect and process cerebrospinal fluid specimens as well as to culture other important sources of virus.
-Michael B. Pritz

The Cold Foot Symptom in Sciatica; a Clinical and Therinographic Study. R.V. Lindholm, T. Myllyla and J. Sarvaranta. Ann. Chir. GynaecoL, 1981,70: 176-181.
USING THERMOGRAPHY, the authors confirm that patients with sciatica from lumbar disc disease frequently do have a lower temperature in the affected foot. They imply that, the more severe the symptoms are, the higher the incidence of thermographically provable cold foot is. They speculate upon the physiopathologic characteristics of the cold foot symptom.
- William R. Bernell

Peripheral Nerve Injection Injury with Steroid Agents. Susan E. Mackinnon, AR. Hudson, F. Gentili and others. Plast Reconstr. Surg., 1982, 69: 482-490.

HISTOLOGIC CHANGES as well as ultrastruc tural alterations in the blood-nerve barrier in the sciatic nerves of rats which are injected with various steroidal agents in the extrafascicular and intrafascicular area are described. The results of dexamethasone, hydrocortisone, triamcinolone A and H, methylprednisolone and normal saline solution were studied. Grossly intrafascicular injection caused immediate swelling, small petechial hemorrhages and spreading along the nerve. At nine to 12 days; little gross change was noted. The incidence of wound infection and dehiscence was reported to be higher in the rats with injection of steroids. Extrafascicular injection produced no noticeable changes. The light and electron microscopic evidence of damage varied with the agent given. Dexmethasone showed minimal damage, and triamcinolone H and hydrocortisone showed widespread axonal and myelin degeneration in both small and large fiber populations. Triamcinolone A and methylprednisolone presented an intermediate picture.

Eight weeks after injection, all nerves demonstrated regeneration regardless of the agent injected. The results of Evans blue albumin studies demonstrated no alteration in blood nerve barrier after extrafascicular injection but with intrafascicular injection, there was breakdown of the barrier in proportion to the damage seen with light and electron microscopy. This finding was confirmed with horseradish peroxidase studies. It is concluded that steroids do have complete regeneration occurs within eight weeks, suggesting an appropriate timing for surgical procedures for these injuries.

-John C. Oakley

Hyperprolactinaemia in Men- Response to Bromocriptine Therapy. R.W.G. Prescott, D. G. Johnston, P. Kendaltaylor and other. Lancet, 1982, 1: 245-249.

EIGHT male patients with hyperprolactineniia, serum prolactin levels greater than 1 ,000 mU./L., underwent plain skull roentgenography, computed tomographic scanning and metrizamide cisternography. Each patient was subsequently treated with 20 mgm./day of bromocnptine and reassessed clinically and roentgenographically. After receiving bromocriptine, the impotence of six of seven patients with this problem improved or returned to normal. fleadache and facial pain of all patients with these symptoms resolved. A reduction in the tumor was reported for all patients receiving a computed tomographic -scan. The serum prolactin level fell to normal in seven and decreased significantly in one patient. Changes in levels of luteinizing hormone were not seen, but the plasma cortisol response to hypoglycemia of two patients became normal, and low serum thyroxine values of two patients normalized. Bromocriptine therapy is believed to be the treatment of choice for men with hyperprolactinemia.

-John C. Oakley

Nes Hypothalamic Hormone. CorticotropinReleasing Factor, Specifically Stimulates the Release of Adrenocorticotropic Hormone and Cortisol in Man. A. Grossman, A.G. Nieuweniiuyzen Kruseman, L. Perry and others. Lancet, 1982, 1: 921-922.

THE ACTIVITY of synthetic, ovine corticotropin-releasing factor was examined in man. Venous infusion, after an overnight fast, was performed in six healthy men in a doubleblind, random, cross-over trial in comparison with a similar volume of the corticotropin-releasing factor diluent, acid saline solution. No significant difference was noted between corticotropinreleasing factor and control periods in the basal level of any anterior pituitary hormone. A rapid rise in adrenocorticotropic hormone followed by a slower increment in circulating cortisol was produced by corticotropin-releasing factor infusion. This effect was statistically significant when compared with the maximum increase after saline solution infusion. No change in the circulating level of any other anterior pituitary hormone was noted. Thus, this effect was specific for corticotropin-releasing factor.

Two conclusions were reached. First, corticotropin-releasing factor or a closely related peptide is likely

to be the endogenous human corticotropin-releasing hormone. Second, corticotropin-releasing factor is believed to act specifically upon the anterior pituitary gland to stimulate adrenocorticotropic hormone release directly. This latter property of corticotropinreleasing factor is suggested to be clinically useful in the differentiation between pituitary andhypothalamic causes of adrenocorticotropic hormone secretion.
-Michael B. Fritz

Desmoid Tumors (Les tumeurs desmoides). S.Ziarek, T. Sawaryn, R. Guzy and other. Lyon Chir., 1981, 77: 323- 324.
DESMOID TUMORS, first described by Muller in 1838, constitute a benign, proliferative process involving musculoaponeurotic tissue. The. cause of these tumors is obscure, but they have been attributed to heredity, trauma, hormones and immunity. The tumor is located in the abdomen in 80 per cent o patients and occasionally in the upper or lower extremity. The tumor is not encapsulated, invades muscle and encircles nerves and vessels but does not metastasize.
Four patients with desmoid tumors are reported upon. The 50 to 70 per cent risk of local recurrence, the need for wide margins of resection and the therapeutic potential of adjuvant radiotherapy were demonstrated.
-James D. Schienker

Separate Skin and Muscle Flaps in Lower-Lid Blepharoplasty. Stanley A. Klatsky and Paul N.Manson. Plast. Reconstr. Surg., 1981, 67: 15 1-156.
A TECHNIQUE for blepharoplasty of the lower cyclid is reported upon. The technique involves an assessment of each individual patient and an analysis of the anatomic defect to determine whether it is attributable to skin, orbicularis oculi hypertrophy or herniated periorbital fat pads. The preoperative assessment is described, and a detailed account of the operative technique is given. This technique consists of a standard subcilliary incision followed by individual dissection of the skin and the muscle flaps. Infraorbital herniated fat pads are partially excised through a wide exposure. following which the muscle is draped, tailored and fixed in a sling manner. The skin of the lower eyelid is then draped according to standard precautions to prevent ectropion and then tailored to the particular patient.
This technique, which is reportedly applicable to all blepharoplasties of the lower eyelid with the exception of those solely attributable to herniated fat pads, has been used upon 532 patients. Complications include transient mild ectropion in 4 per cent of the patients and hematoma in 3 per cent.
-Richard O. Gregoiy

Primary Radiation Therapy in the Treatment of Early Breast Cancer.Samuel. Heilman, Jay R.Harris and Martin B. Levene. Ist. Med. Sci., 1981, 17: 922-926.
IN THE INTRODUCTION, the history of the treatment of early carcinoma of the breast by local excision and local irradiation is reviewed. It was pointed out that, in the past, the poor quality of the equipment and radiotherapeutic techniques and the inadequacy of the dose contributed to poor local control.
From those previous reports, several conclusions were derived. Larger doses of 6,000 rads to control bulky tumors and moderate doses of 4,500 to 5,000 for subclinical or microscopic disease are required. Radiotherapy can be facilitated by the resection of bulky disease. The technical aspects of radiation therapy are extremely important. Local tumor control can be maximized by a combination of interstitial and external irradiation.
The results of the treatment of 176 patients with 184 instances of carcinoma of the breast from July 1968 to December 1976 are reported upon. The treatment was carried out with a 4 Mev. linear accelerator delivering weekly dose of 1,000 rads in four or five divided fractions directed to tangentially opposed portals to the chest wall and underlying pleura of the breast. The ipsilateral

axillary and supraclavicular lymph nodes were treated through an anterior portal. The dose ranged from 4,000 to 6,300 rads, an average of 5,000 rads.
When there was no evidence of disease in regional lymphatics, the dose was 4,600 rads, and in the presence of involvement, an additional 1,500 rads was given. External beam radiation was followed by interstitial implant to the primary tumor using afterloading iridium technique. Three of 62 patients with Stage I disease and eight of 122 patients with Stage II disease had local failure. From the results of this study, it appears that, when less than a sectional biopsy is performed, local recurrences are more frequent.
Of the 73 patients who had an interstitial implant, there was one local failure, compared with ten local failures among the 111 patients who did not have an implant. This was statisti. cally significant, $P < 0.05$. Age or site of presentation did not change the likelihood of local failure. Complications were classified as mild or transient, those such as pleural effusions, rib fractures and radiation pneumonitis,in 16 patients; and significant, those such as peri cardial fibrosis and edema and weakness of the arm, in four patients. It was concluded that, while it is too early to evaluate survival results for patients with Stage I and II disease, this therapy showed no adverse effects, and the use of radiotherapy as an alternative to mastectomy in patients with operable carcinoma of the breast was encouraged.
-Beatriz E. Amendola

Criteria for the Definition of Early Carcinoma of the Breast (Kriterien zur Abgrenzung von Fruhfallen des Mammakarzinoms). H.FI. Zippel, M. Hardt and P. Citoler. Dtsch. Med. Wochenschr., 1981, 106: 605-609.
A GROUP of 114 patients with infiltrating carcinoma of the breast I cm. or less in diameter and 88 with noninfiltrating carcinoma without size limitation were investigated for the presence of metastases to the lymph nodes. These patients were selected from a total of 977 with carcinoma of the breast who were treated during an eight year period at the institution. Tumor size was measured at the time of frozen section after an attempt to excise totally the primary tumor with the biopsy. The patients with noninfiltrating carcinoma had a significantly lower mean age than the entire group with carcinoma of the breast. Fifth-five per cent of the incidences of noninfiltrating carcinoma and 24 per cent of the incidences of infiltrating carcinoma which were smaller than I cm. were clinically occult and diagnosed only by mammography. Only one of the 88 instances of noninfIltrating duct cell or lobular carcinoma was associated with axillary metastases. Metastases to the axillary lymph nodes were present in 25 per cent of the 100 instances of infiltrating carcinoma which were not further designated and were less than I cm. in diameter. No metastases to the lymph nodes were found in the five patients with tubular carcinoma, the two with papillary carcinoma and the two with mueinous carcinoma less than I cm. in diameter. None of the six patients with infiltrating carcinoma less than 0.5 cm. in diameter showed metastases to the lymph nodes.
The five year mortality from carcinoma was seven of 18 patients with infiltrating carcinoma and metastases to the lymph nodes, one patient of 34 with infiltrating carcinoma without metastases to the lymph nodes and zero of 24 patients with noninfiltrating carcinoma. It is concluded that, from a prognostic point of view, all instances of noninfiltrating carcinoma of the breast and infiltrating carcinoma up to 0.5 cm. in diameter can be considered early carcinoma of the breast.
-Lrving B. Margolis