

Investigación Clínica

Apartado Postal N° 1151 — Maracaibo - Venezuela

Summaries

Investigación Clínica. N° 25. 1968.

GARCIA TAMAYO, F. **"Electrophoretic pattern of serum proteins in 100 healthy infants"**. Invest. Clin. N° 25: 7-25. 1968.

Electrophoretic analysis of serum proteins was determined in 100 healthy infants, ages between one-week and 24-months-old. A micromethod was utilized to obtain the total serum proteins values. Results are compared with those obtained for normal adults and for newborns in the area of Maracaibo.

We concluded that 1— the variations occur in the first six months of life; 2— total serum proteins values are lower than those of the adults; 3— albumin values are low in newborns; 4— alfa-2 globulin value was low in infants less than three-months-old; 5— hypergamma-globulinemia was found in newborns one-week-old and hypogammaglobulinemia in those between two— and five-months-old.

VILLALOBOS, J.; GUERRERO, E.; HERNANDEZ, V.; NAVA, G. **"Clinical and epidemiological outlook of poliomyelitis in Maracaibo, Venezuela"**. Invest. Clin. N° 25: 27-37. 1968

A survey is made of the cases of poliomyelitis accepted in the University Hospital of Maracaibo during a three and a half years lapse (1960-1964). It is shown that poliomyelitis is more frequent in males than in females and most of the cases occur in children under 5 years of age. Mortality rate is low. Diagnosis was confirmed by viral isolation and serological tests in 32 out of 43 children studied, being Polio II more often incriminated, followed by Polio III and lastly Polio I.

LUZARDO BAPTISTA, M. **"Oral leukoplakia"**. Invest. Clin. N° 25: 39-51. 1968.

Fifty biopsies of oral leukoplakia were studied. The percentage of the components of these leukoplakias were recorded. The predominant features were: hyperkeratosis (78%), parakeratosis (62%), suprapapillary acanthosis (68%), rete peg's acanthosis (85%), stratum granulosum (38%), cellular atypism (38%), basilar hyperplasia (56%), leukedema (10%), nuclear atypism (20%), inflammatory infiltration (62%).

Eighty-four per cent were recorded as leukoplakia and

16% as dyskeratosis. Among these two carcinomas in situ were found. It is proposed that the term of leukoplakia should only be used in the dyskeratosis.

NEGRETTE, A. **"Venezuelan equine encephalitis: relative differential leukocyte count"**. Invest. Clín. N° 25: 53-65. 1968.

Fifty peripheral blood smears from patients with Venezuelan equine encephalitis were studied. Most of the cases showed a pathological differential formula and such alterations were distributed as follows: neutrophilia, 22 cases; neutropenia, 21 cases; moderate eosinophilia, 3 cases; high eosinophilia, 3 cases; eosinopenia, 24 cases; moderate basophilia, 3 cases; moderate monocytosis, 5 cases; Fourteen cases showed lymphocytic plasmocytes in peripheral blood. There were patients who presented simultaneously two or more of the described alterations.

Our results are compared with those from other authors and discussed with regard other encephalitic or viral problems.

CASTEJON, O. J. **"Synaptic contacts between Purkinje cell dendrites and parallel fibers. An electron microscopic study"**. Invest. Clín. N° 25: 67-83. 1968.

1. Mouse cerebellar nervous system was fixed by the vascular perfusion technique using one per cent solution of glutar-

aldehyde-sodium phosphate buffer, the pH as 7.4 and osmolarity of 380-410 mOsm/liter. Small pieces of cerebellar cortex were immersed in a similarly buffered, 1% solution of osmium tetroxide, embedded in Epon, stained with uranyl acetate or lead citrate and examined with the electron microscope. 2. Parallel fibers show fusiform thickening at the level of the synaptic contact with the Purkinje dendritic spines. The fusiform thickening contains cluster of synaptic vesicles and mitochondria. 3. The dendritic spines pierce the glial investment and often indent the parallel fibers making invaginate spine synapses. 4. At the region of contact, the pre- and postsynaptic membranes are thickened and the postsynaptic membrane is clearly thicker than the presynaptic one. Each membrane show the triple-layer structure characteristic of the plasma membrane. An electron dense material is associated with the innermost leaflet of synaptic membranes, mainly at the level of the postsynaptic one. 5. The spine synapses are completely surrounded by a glial cytoplasm, astrocytic in nature, which presumably belong to Bergmann fibers, Fañanas glia or astrocytes of the molecular layer.

CASTEJON, O. J. **"Submicroscopic features of Purkinje cell dendrites"**. Invest. Clín. N° 25: 89-108. 1968.

1. Mouse cerebellar cortex was fixed by the vascular per-

fusion technique using one per cent solution of glutaraldehyde-sodium phosphate buffer, the pH as 7.4 and osmolarity of 380-410 mOsm/liter; post-fixed in 1% osmium tetroxide-sodium phosphate buffer solution, embedded in Epon, stained with uranyl acetate or lead citrate and examined with the electron microscope. 2. Purkinje cell dendrites show numerous endoplasmic reticulum membranes, free ribosomes, elongated mitochondria, dendritic canaliculi and an unusual arrangement of the endoplasmic reticulum; the endoplasmic cisternae systems. 3. The endoplasmic cisternae system is discussed as a membranous array existing in the "in vivo" condition. 4. The surface of the Purkinje cell dendritic branches and dendritic spines represent the postsynaptic receptor zones. 5. Purkinje cell dendrites and its spines are covered by a glial sheath, which presumably belong to the Bergmann astrocytes.

"La doble finalidad —profesional y científica— y la obligación de lograrla de modo satisfactorio crean a la Universidad la necesidad imprescindible de medios adecuados: bibliotecas, laboratorios, clínicas a la altura de su misión ineludible. La exigencia de estos medios es tan importante como la de buenos maestros, elegidos únicamente con el criterio de su capacidad y eficiencia: estas exigencias son otra lección de la historia que muestra el florecimiento de las Universidades cuando las han satisfecho y su decadencia cuando las han olvidado".

Rodolfo Mondolfo

"Universidad: pasado y presente"