

Investigación Clínica

Apartado Postal N° 1151 — Maracaibo - Venezuela

Summaries

Investigación Clínica. N° 26. 1968.

CARVALLO ISTURIZ, E. **"Contribution to the study of intracranial ependymomas in Venezuela"**. Invest. Clín. N° 26: 7-44. 1968.

Twenty-three cases of histologically confirmed ependymomas are analyzed. This is an important number of cases taking in account the scarce amount of them reviewed in the world literature. The investigation revealed the following: 1) It is prevalent in the male at the ratio 3:1. 2) The tumor is clearly predominant in the two first decades of life. 3) Time evolution of the disease from the beginning to the admission to the hospital was variable from several days up to 7 years. 4) In 22 cases endocranial hypertension was present. The clinical findings were in all cases related to the topographic localization of the tumor. Sixteen of them were infratentorial and 7 supratentorial. 5) The most useful test for diagnosis was the radioventri-

culography followed by cerebral angyography and iodoven-triculography. Electroencephalogram, spinal fluid tap and radiology were useful parameters. 6) Eighteen cases underwent surgical treatment being the mortality 3 cases. The patients survival was followed up to a period of four years.

FEREIRA V., H.; CASTEJON, O. J. **"Submicroscopic observations on the sinovial fluid in rheumatoid arthritis. Report of a case"**. Invest. Clín. N° 26: 45-70. 1968.

The alterations on the fine structure of fluid sinovial leukocytes in a patient affected with rheumatoid arthritis were studied. The sinovial fluid was primarily fixed in glutaraldehyde solution, post-fixed in osmium tetroxide and embedded in Epon. Thin sections stained with uranyl acetate were observed with the electron microscope. The polymorphonuclear leu-

kocytes show endoplasmic reticulum canaliculi containing an homogenous material more electron dense than that observed in the cytoplasm. The presence of phagosomes, phagocytic vacuoles, globular structures and dense bodies were observed. No alteration of the nucleus was found. The extracellular containing is represented by a proteinaceous granular material, cellular membrane fragments, granulated vacuoles and fibrinoid material. An intense phagocytic activity of these structures elements was observed. The probable nature of these leukocytes and extracellular elements and their relationship with the pathogenesis of rheumatoid arthritis is discussed.

CASTEJON, O. J. "The endoplasmic cisternae system of Purkinje dendrites of human cerebellum". *Invest. Clín.* N° 26: 71-79. 1968.

The cerebellar cortex of four patients with neoplastic and vascular diseases of cerebellum was examined with the electron microscope. Small fragments were primarily fixed with glutaraldehyde, post-fixed with osmium tetroxide and embedded in Epon. The Purkinje cell den-

rites show an unusual arrangement of the endoplasmic reticulum, formed by a stack of 3-6 smooth membrane-bound cisternae in parallel arrangement, which often appear extremely dilated revealing presumably an intraneuronal edema. This membranous arrangement seems to exist in the living tissue and shows some functional plasticity.

CASTEJON, O. J. "Some observations on Epon embedding procedure in a warm and humid region". *Invest. Clín.* N° 26: 81-95. 1968.

Different soft tissues and free cells in suspension such as mouse cerebellum, rat liver, oral human mucosa, blood and sinovial fluid, leukocytes and BHK21 cultured cells were primarily fixed in glutaraldehyde, post-fixed in osmium tetroxide and embedded in Epon. Due to the hygroscopic properties of this epoxy resin, the embedding procedure was modified in order to be applied in a warm and humid region. Tissue embedding was performed at 70°F and at a relative humidity of 40%. The infiltration and polymerization time was prolonged. Satisfactory blocks were obtained with A and B mixtures

blended in the proportion of 2:8. Chattered sections were frequently obtained. In some cases, the mitochondria become obviously swollen and vacuolated. Also the cisterns and canaliculi of the endoplasmic reticulum appear moderately distended. These findings were interpreted as polymerization damage.

NEGRETTE, A. "**Venezuelan equine encephalitis. Vacuolated leukocytes**". Invest. Clín. N° 26: 97-106. 1968.

An study is made of the smears of capillary blood taken from fifty patients affected with Venezuelan equine encephalitis virus. Vacuoles were observed in leukocytes in ninety-eight per cent of the cases. It is proposed the idea that the vacuoles are a consequence of citopathogenic viral action.

RYDER, E. "**The lipids and their role in metabolic regulation**". Invest. Clín. N° 26: 107-119. 1968.

A review is made on the basic functions of the lipids, mainly as energy fuel. The steps of the "de novo" biosynthesis are reviewed, making considerations about the sequency of reactions leading to long chain fatty acids, and the presence of extramitochondrial acetyl CoA, key compound for the biosynthesis. The regulation exerted by the final products, long chain fatty acids or their acyl CoA esters as inhibitors, and citrate as activator, is localized at the carboxylation step. The mechanism of ketosis is discussed and some enzymatic patterns in different metabolic states like diabetes, starvation and obesity are described.
