

# ***Investigación Clínica***

Apartado Postal N° 1151 — Maracaibo - Venezuela

## *Summaries*

*Investigación Clínica. N° 27. 1968.*

PARODI-HUECK, L.; DENSLER, J.; REED, R. C.; POULOS, P. "**Congenital cystic adenomatoid malformation of the lung. Report of a case**". Invest. Clin. N° 27: 7-16. 1968.

A case of congenital cystic adenomatoid malformation of the lung in a newborn which was treated successfully by resection of the affected lobe is reported. This case plus 39 cases reported in the English literature are reviewed. The clinical manifestations, radiological features and the treatment of this entity are discussed. The importance of early resection of the involved lobe or lobes is emphasized.

LUZARDO-BAPTISTA, M. J.; CASTEJON, O. J. "**Fine structure of the stratum spinosum cells of the normal human oral mucosa**". Invest. Clín. N° 27: 17-38. 1968.

Samples of normal human oral mucosa were fixed in glu-

taraldehyde, postfixed in osmium tetroxide and embedded in Epon. Thin sections were stained with uranyl acetate and examined with the aid of the electron microscope. The cytoplasm shows abundant free ribosomes tonofibrils and a poorly-developed, rough surfaced endoplasmic reticulum. The Golgi complex is apparently of a vacuolar type. Few mitochondria are seen. In some electron micrographs vacuolar structure of fine granular content is observed in the vicinity of the nucleus. The cell surface has long, flexible microvilli. Clear vacuoles are observed in its basal region. Cells are joined by desmosomes formed by two attachment plaques and a dense intercellular line of a triple layer structure. Large intercellular spaces are found, some of which contain an amorphous substance. The stratum spinosum cells possess a large nucleus and one to three nucleoli. The probable physiological significance of these findings is

discussed in the light of previous information.

SOTO-ESCALONA, A.; CASTEJON, O. J. "Study of the nucleus of the BHK21 cultured cells". Invest. Clin. N° 27: 39-55. 1968.

The nuclear structure of BHK21 cultured cells was studied with light, fluorescence and electron microscopy. The nucleus was irregular in shape with deep infolding of the nuclear envelope which lobulated it exagerately. These infoldings allowed us to obtain tangential sections where the nuclear pores were observed in the frontal plane. Chromatin adhered to the inner nuclear membrane showed channels to the nuclear pores. A multiple number of nucleoli was found for each cell, and, with few exceptions, it was found that all the infoldings of the nuclear envelope converged to the site of localization of the nucleolus.

CASTEJON, O. J. "Electron microscopic observations of the molecular layer of the cerebellar cortex". Invest. Clin. N° 27: 57-108. 1968.

1. Mouse cerebellar cortex was fixed by the vascular perfusion technique using one per

cent solution of glutaraldehyde-sodium phosphate buffer, the pH as 7.4 and osmolarity of 380-410 mOs/liter; postfixed 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, elongated mitochondria, dendritic canaliculi and an unusual arrangement of the endoplasmic reticulum: the endoplasmic cisternae systems. The functional significance of this membrane array is discussed. 3. The Purkinje cell dendritic branches give off dendritic spines which represent the postsynaptic structural elements. 4. Purkinje cell dendrites and its spines are covered by a glial sheath, which presumably belongs to the Bergmann astrocytes. 5. The fusiform thickening of the parallel fibers establish synaptic connexion with the Purkinje cell dendritic spine. The parallel synaptic enlargement contains synaptic vesicles, mitochondria and a dense-homogenous substance. The dendritic spines containing membrane profiles, deeply impress the parallel synaptic terminal, making "invaginate spine synapses". 6. At the region of contact, the pre and postsynaptic membranes are

thickened and the postsynaptic membrane is clearly thicker than the presynaptic one. The synaptic junction resembles Gray's type I synaptic contact. 7. The spine synapses are completely surrounded by a gliial cytoplasm, astrocytic in nature. 8. The stellate neurons show a prominent nucleus, surrounded by a thin ring of cytoplasm, which contains scarce rough endoplasmic reticulum membrane profiles and numerous free ribosomes. The cytoplasmic organelles such as mitochondria, Golgi complex and lysosomes exhibit the ultrastructural features already described in another cellular types. 9. Synaptic knobs were observed surrounding the neuronal body and at the level of the axon hillock. These synaptic endings presumably correspond to parallel

and climbing fibers. 10. The stellate cell axons end in the Purkinje cell dendritic surface by means of synaptic knobs containing synaptic vesicles and mitochondria.

DIEZ-EWALD, M, "Iron deficiency anemia in childhood. A review". Invest. Clín. N° 27: 107-117. 1968.

A review of the physiopathological aspects of iron deficiency anemia and its etiology and treatment in infancy and childhood is made, with descriptions of the different causes of this disease as related to age. Iron administration routes and dosis are discussed and is pointed out the fact that blood transfusions are not necessary nor recommended in the treatment of the disease.

---