

**53** ARTERIAL HYPERTENSION AND MALFORMATIONS OF THE SMOOTH MUSCLE OF THE VASCULAR WALL. Luis Becu, J. Mendilaharsu & Beatriz Grunfeld. Hospital de Niños. Buenos Aires. Argentina.

Arterial hypertension has multiple aetiologies, and is called "essential" when none of them is discovered. There is a congenital malformation of the cellular architecture of the smooth muscle in the arterial media, that is present in patients that develop systemic and/or pulmonary hypertension in several combinations of severity. Post-mortem findings in 37 such patients are described. Twenty two of them were less than one year of age at the time of death.

The embryopathy is associated with smooth muscle necrosis, that is repaired with focal defects or by haphazard proliferation of new muscle that is completely disoriented in space. This muscular dysplasia may be so diffuse (DMD) and severe as to be lethal in early infancy, or manifest itself years later with damage in badly perfused target organs. It can also be associated with other forms of cardiovascular embryopathies.

The concept of DMD lends perspective to an intriguing field of functional, pharmacologic and genetic research. It adds to the interpretation of the natural history of a variety of clinical findings, and may be related to some forms of hypertension and atherosclerosis in the adult.

**54** CONGENITAL NEPHROTIC SYNDROME (C.N.S.). Gallo, G.E. Pathology. Htal. de Niños. Buenos Aires. Argentina.

Twelve infants with idiopathic C.N.S. starting before 5 month of age were studied. All died. Autopsy was performed in 10, and renal biopsy only in 2. According to their glomerular changes they were divided in 4 groups: I) Minimal change: 4, no one developed renal failure (RF); tubular microcysts were present in 2. Of 2 sibs, both with autopsy, only one had "microcystic kidney". II) Fetal glomerular sclerosis: 2, both with tubular microcysts and RF. III) Proliferative glomerulonephritis: 2, both died of infection without RF; autopsy was not performed. IV) Diffuse complex glomerulopathy: 4, all of them with RF, mesangial proliferation and basement thickening, one had Wilms' tumor and another masculine pseudohermaphroditism. Diffuse mesangial sclerosis (Habib) was not found in any of the 12 infants.

Systematization of C.N.S. is still difficult. Non specificity of tubular microcysts, and the importance of differentiating between fetal glomerular sclerosis and focal sclerosing glomerular sclerosis and focal sclerosing glomerulopathy are stressed.

**55** VENOUS ANOMALY OF THE LOWER LIMBS IN PEDIATRIC KLIPPEL-TRENAUNAY (K.T.) PATIENTS. Antonelli C., Papendieck C., Barends A. Radiology, Surgery, Nuclear Medicine. Hospital de Niños. Buenos Aires. Argentina.

We studied 40 children with K-T syndrome (A-V fistulae) by means of radiological phlebography and radioisotopic arteriography. We found A-V fistulae and venous malformations as follows: 1) complete venous obstruction; 2) partial venous obstruction; 3) venous dysfunction of the distal third of the superficial femoral vein. This finding in a pediatric population may show the congenital origin of the K-T syndrome.

The findings in the performed phlebographies allow us to state that venous hypertension may cause increased volume of the lower limbs in these children (bone and soft tissues), in a way similar to that found in children who underwent phlebocatheterization and later presented secondary venous obstruction.

**56** MECKEL'S DIVERTICULUM: DIAGNOSIS BY  $Tc^{99m}$  SCAN. Schere D.B., Barends A.L. and De Rosa Susana. Hospital de Niños. Buenos Aires. Argentina.

We report 40 children to whom  $Tc^{99m}$  scan of the abdomen was performed, looking for Meckel's diverticulum(°). This nuclide is excreted by the gastric mucosa, showing the ectopic mucosa which 50% of all Meckel's diverticula have. These 40 children come from a total number of 134 scans, and we arrived to a final diagnosis by laparotomy in 30, and by other methods in 10.  $Tc^{99m}$  was injected intravenously, and gamacamera pictures were taken from 0 to 30 minutes.

RESULTS (for 40 children)			
scan	laparotomy	N°	Diagnosis by scan
			correct false
.....	.....	.....	.....
+	+	11(28%)	31(78%)
.....	.....	20(50%)	.....
+	-	3(8%)	.....
.....	.....	6(16%)	9(22%)

(°) Allen, Duszynski, Jewett; Am. J. Roentgenol. 113:258;71.

(°°) 10 patients' final diagnosis by X-ray or endoscopy.

**57** PSITACOSIS IN CHILDREN, OUR EXPERIENCE. PARAMETERS OF DIAGNOSIS. Cecchini E., Drut R. and González Aya-la S.E. Children Hospital of La Plata.

As a result of epidemic outbreaks of psitacosis-ornithosis we tried to establish the clinical-epidemiological-laboratory parallelism. Specific techniques employed were: Complement Fixation and LCL corpuscles search in respiratory secretations and blood (applied for the first time to psitacosis diagnosis on human beings).

Forty-four patients were assisted, 13 of whom were children.

Clinical types are classified as: a) Non-apparent or non-symptomatic, b) Minor: rhinal-sinusitis; bronchopulmonary, c) Common or Influenzal pneumonia, d) Serious: Diffuse dyspnoeic pneumonia; pseudolobar pneumonia with sanguinolent sputum; meningoencephalitis.

Thirty per cent of the children showed morbilliform exanthema. Eight out of the 13 affected children had a positive complement fixation (> 1/8) and 10 had positive LCL corpuscles in respiratory secretations.

The systematic study of LCL corpuscles, in serial samples is considered most useful, due to:

- 1- It is an easy technique.
- 2- The results are obtained within 24 hours.
- 3- Corpuscles are not rendered negative with the start of a specific therapy with tetracyclines.

**58** HEMOGLOBIN (Hb), HEMATOCRIT (Htc) VALUES IN NORMAL INFANTS. Lemus A.J., Goldar D., Sackmann Muriel F. Serv. de Hematología, Htal. de Niños and Instituto de Investigaciones Hematológicas, Buenos Aires. Argentina.

Determinations of Hb, Htc and Mean Corpuscular Hemoglobin Concentration (MCHC) were performed on 207 samples taken from 147 infants 15 to 370 days of age with more than 2500 g weight at birth. They were healthy infants followed in the Out-patient Department, and on an adequate diet without iron supplementation. Hb was determined by the cyanhemoglobin method, Htc by means of the micro hematocrit technique, and the MCHC by the relation Hb (g/dl)/Htc(1/1). The mean values obtained were:

Age	No.	Hb(g/dl)(+ 2SD)	Htc(%) (+ 2 SD)	MCHC(g/dl)
14-30	43	14.0 ± 4.7	46.3 ± 13.8	35.1
31-60	28	12.9 ± 4.1	36.5 ± 11.8	35.4
61-90	23	11.4 ± 2.2	32.5 ± 6.8	35.3
91-120	25	12.0 ± 1.5	34.2 ± 5.5	35.2
121-180	22	12.3 ± 1.5	35.1 ± 4.7	34.9
181-240	30	11.9 ± 1.8	34.2 ± 3.9	34.6
241-300	18	12.1 ± 2.1	35.1 ± 4.3	34.4
301-370	18	12.1 ± 2.1	35.6 ± 4.3	34.1

The data are presented in the percentile form. The results of other similar/are discussed. We concluded that these results will be useful for the pediatrician working in our area.