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FACTORS DETERMINING NUTRITIONAL STATUS OF MOTHERS AND CHILDREN OF THE LOW SOCIOECONOMIC LEVEL. F.J. Nobrega, M.R.V.Coelho, A.L.D. Brasil, F. Ancona López, M.Fisberg. Dept. of Pediatrics Paulista Medicine School, São Paulo, Brazil.

Factors determining the nutritional status (NS) of 1321 children and mothers of low socioeconomic levels; attended in the Pediatric Department of the Paulista Medicine School were investigated. According to Gomez and Waterlow, 50.6% of the children were malnourished, 44.8% eutrophic and 4.6% were overweight or obese. According to the criteria of Jelliffe 12.4% of the mothers were malnourished, 53.4% eutrophic and 34.2% were overweight or obese. Of the mothers of malnourished children 55.1% were eutrophic, 14.3% malnourished and 30.6% overweight or obese. Correlation between the child's NS and birthweight was highly significant ( $p < 0.001$ ). The Goodman test, showed an association between malnutrition, low income and maternal education and high number of sibling. There was no association between maternal malnutrition, income and education. A higher number of children and more advance maternal age was associated with overweight and obesity. There was no association between NS of mothers and children and maternal work. Maternal birthweight income and education are important factors in child NS. The determining factors of post-natal malnutrition are different for mothers and children.

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INTRACRANEAL TUMORS THAT ALTER ENDOCRINE FUNCTION IN CHILDREN AND ADOLESCENTS. II. ENDOCRINE STUDIES BEFORE AND AFTER SURGERY. A.Belgorosky, A.Caresana, E.Chaler, M.Maccinas, M.Warman, M.Castellano, S.Iorcansky, H.Mendilaharsu, M.Rivarola. Servicio Endocrinología, Hospital Pediatría "Garrahan", Buenos Aires, Argentina.

Pituitary function was evaluated in 25 patients with intracranial Tumors (T). Basal thyroid function (T<sub>4</sub>, T<sub>3</sub> and TSH) was altered in 1/22 patients before (Pre) and in 3/19 within the first month after surgery (Post). TRH-TSH was abnormal in 7/14 Pre and in 9/18 Post. Basal prolactin (PRL) was high in 4/14 Pre and in 4/15 Post (2 patients had prolactinoma) while TRH-PRL was high in 3/12 Pre and in 2/15 Post. Serum somatotropin response to a stimuli was  $< 10\text{ng/ml}$  in 8/14 patients Pre and in 13/15 Post and  $< 5\text{ng/ml}$  in 5/14 patients Pre and in 7/15 Post. In pubertal patients gonadotrophic function was deficient in 4/7 Pre and 2/3 Post. In prepubertal patients (n= 8-9), the LH-RH test was normal. Basal cortisol was low in 1/14 Pre and 2/11 Post; in another 2 patients symptoms of adrenal insufficiency were observed Post. Diabetes insipidus was diagnosed in 3/25 patients Pre and in 10/25 Post being transient in 4 of the latter. B-hCG was high in 2/7 cases, both with germ cell T. A high Pre incidence of somatotrophic, thyrotrophic and pubertal gonadotrophic deficiency was found. PRL was high in prolactinomas and it was moderately increased in only 2 other patients. Surgical morbidity was low, except for the somatotrophic function.

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CHAGAS DISEASE IN IMMUNOCOMPROMISED PEDIATRIC PATIENTS. H.Freilij, R.Debbag, R.Bologna, M.F.Sackman. Hospital de Niños "Ricardo Gutiérrez", Hospital de Pediatría "Juan P.Garrahan". Buenos Aires, Argentina.

The most severe manifestation of Chagas' disease are seen in immunocompromised individuals or in newborn children infected by transplacental route. Three oncohematological patients from endemic areas with severe manifestations of infection due to *T. cruzi* were studied. Two patients (11 and 9 years old) suffered from acute lymphoblastic leukemia in continuous complete remission for 18 and 24 months respectively and were treated with multiple combined chemotherapy. Both consulted because of severe neurological manifestations caused by expansive cerebral lesions that led to intracranial hypertension, confirmed by CT scan. In both cases the etiology was revealed by the presence of amastigotes in cerebral biopsies. None of them received transfusions during the preceding 48 months. The third case (8 years old) with medullar aplasia was treated with antilymphocytic globuline, ciclosporine and repeated transfusions, who consulted for fever and hepatitis. The parasitological diagnosis of the three patients was made through the detection of *T. cruzi* in peripheral blood and by the presence of specific antibodies. They were treated with nifurtimox and their parasitemia became negative after 7 days. Because of the lack of previous data related to this infection it is not known whether this is an acute infection or a reactivation. In every immunocompromised patient due to the underlying disease or its treatment, specially in those coming from endemic areas and who have received transfusions, it is important to detect infection by *T. cruzi* at the beginning of the disease and to be alert to this etiology in febrile episodes whatever their clinical manifestaions.

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THE PROTEINS C-S SYSTEM IN CHILDREN WITH SECONDARY PULMONARY HYPERTENSION. A.A.B.Lopes, N.Y.Maeda, M.Ebaid, D.A.F.Chamone. Heart Institute, University of Sao Paulo, Brasil.

Plasma levels of protein C (PC), total protein S (PSt) and free protein S (PSf) were assessed by electro-immunodiffusion in 6 healthy children (1 to 14 yr) and in 6 children with pulmonary hypertension and polycythemia secondary to congenital heart disease (3 to 15 yr) before and after intentional hemodilution (HD) which was planned to achieve a 10% decrease in hematocrit. Results are expressed as a percentage of antigen (mean  $\pm$  SD).

	PC(%)	PSt(%)	PSf(%)	Hematocrit(%)
Controls	85 $\pm$ 5	114 $\pm$ 18	91 $\pm$ 23	
Patients				
Baseline	66 $\pm$ 16*	101 $\pm$ 19	66 $\pm$ 13*	66 $\pm$ 6
Post-HD	72 $\pm$ 16	90 $\pm$ 14	62 $\pm$ 18	58 $\pm$ 5

\*  $p < 0.025$  vs. controls.

Severe pulmonary vascular damage and hyperviscosity are likely to be the main causes of consumption coagulopathy in this syndrome, with decreased plasma levels of PC and PSf which are not significantly improved by moderate hemodilution.

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HEIGHT AND WEIGHT OF 88.000 18 YEARS OLD RECRUITS: BASIS FOR A COUNTRY-WIDE EPIDEMIOLOGICAL SURVEILLANCE SYSTEM IN ARGENTINA. H.Lejarraga, E.Abeyá, Boffi Boggio, J.H.Andrade. Hospital de Pediatría "Garrahan" and Centro de Investigaciones Epidemiológicas, Buenos Aires, Argentina.

Height and weight were measured in a standardized way in all 18 years old male recruits for the army during 1987. The sample represents approximately 50% of the total Argentine citizens at that age. Significant differences in both measurements between provinces were found. Boys from Jujuy and Buenos Aires showed the lowest and highest values for height and weight, respectively. Differences in both parameters between both areas were 7.0cm and 8.0kg, respectively. Correlation coefficients between anthropometric measurements and socioeconomic indicators in the Provinces were higher for weight than for height and consistent with the degree of development of each area. Correlation between NBI (Basic non satisfied needs) and weight and height were -0.87 and -0.59, respectively. Weight/Height was similar to those described in Italy, U.Kingdom and Germany, and higher than those reported for Peru, Colombia, Costa Rica and Cuba. The availability of this information, elaborated on annual basis, integrated to the National Recruiting system and to the Health Statistics system from the Public Health Ministry will allow a periodic and regular analysis of the trends in physical growth as an indicator on health and welfare at the national level.

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CAUSES OF ACCIDENTS IN CHILDREN AND ADOLESCENTS (0-24 YEARS) UNDER CARE IN HOSPITALS IN SAO PAULO (BRAZIL) FROM SEPTEMBER 12 TO 27, 1988. B.J.Schmidt, A.A.Stella, W.Maciel, F.M.Ueno, L.Silva, M.I.Gonçalves, and F.M.P.

Rocha. Dept of Pediatrics "Escola Paulista de Medicina" and Epidemiology Group, Prefecture of Sao Paulo, Brazil. All accidents involving people from 0 to 24 years (Y) of age treated at the eight City Hospitals, during September 12-27, were analyzed using the WHO/IPA Accidents Committee protocol. Of the 6,557 accidents, 60,2% affected males; 95% were true accidents and 4,2% were intentional injuries. Of the 6,231 true accidents, 21,7% involved children of 0 to 4 years of age, 22,5% were 5-9, 23,2% were 10-14, 20,3% were 15-19 and 12,3% were 20-23 Y 11 months; 53,3% were downfalls, 12,7% impacts, 11,3% caused by machinery, 7,6% traffic accidents, 5,4% animal bites, 2,7% burns. 50,8% occurred at home, 33,2% in public areas, 15,0% inside institutions. Of the home accidents: 38,2% occurred in courtyards, 14,2% in the bedroom, 13,2% in the kitchen, and 10,45% in stairs. Accidents at institutions: public and private kindergarten accounted for 16,2%, schools for 51,8%, factories for 19,5%. Most accidents at public places occurred in: streets 80,8% or play fields 6,0%. Upper and lower limbs were affected in 63,6%, skull in 12,3%, the face in 7,7%. Most accidents occurred during the day. Nine patients were dead on arrival. Of the accidental deaths directly referred to the Legal Medicine Institute: 113 cases, with 85,4%, males, 74,2% 15-23Y 11 months of age. Cause of death: traffic accidents 30,0%, burns 6,1%, drowning 7,0%, suicide 5,3%, homicide, aggression or resisting to it: 44,2%.