1 Bile salt-enhanced rat jejunal absorption of a macromolecular tracer. Fagundes Neto,U.;Teichberg,S.; Bayne,M.A.;Lifshitz,F.-Department of Pediatrics and Laboratories North Shore University Hospital,Cornell Medical College, New York,N.Y., U.S.A.

Bile salt deconjugation may occur in the jejunun under conditions of fecal colonic overgrowth of the small intestine.We studied the effects of conjugated and deconjugated bile salts on rat jejunal absorption of a macromolecular tracer,horseradish peroxidase(HRP), in an in vivo perfusion system.At a 0.5mM perfusion concentration, only the deconjugated bile salts,cholate and deoxycholate,produced a significant increase in HRP absorption into serum.At this level the bile salts did not produce evidence of morphological damage to villi or absorptive epithelial cell organelles.At a 0.5mM concentration of the conjugated salt,taurocholate,HRP absorption was indistinguishable from that seen in bile salt free preparations.At a higher 5mM concentration,both the conjugated and deconjugated salts increased jejunal HRP absorption into serum over that seen in bile salt free preparations;this absorption was most marked with the deconjugated salts.At a 5mM level,the deconjugated salts also damage cellular organelles,including mitochondria and Golgi apparatus.Our observations suggest that an alteration in the tigh junctional barrier to macromolecular absorption may play a role in some of the enhanced HRP absorption seen in these experiments with low concentrations of DCh.A more extensive cellular damage leading to enhanced HRP transport may occur with higher concentrations of bile salts.

2 Malnutrition, Haematologic alterations and Folic Acid valuation by Radio Inmuno Assay (RIA).TERAN,J.M.;SAN MARTIN,E.;SALAZAR,M.;BASSANTES,J.;GORDON,P.;CALDERON, J.Central University Second Pediatrics Postgraduate Course,Baca Ortiz Childrens Hospital,Quito, Ecuador.

We have studied 75 children at the Baca Ortiz Childrens Hospital in Quito,they have been pattern selected by hazard from a total of 1925 kids.Their ages are between 3 to 36 months.We have found a 72% of underfeeded, with a predominance of a third degree malnutrition(33,4%).The causes of hospitalization were:Bronconeumonia (45,3%),Diarrhea(26,6%), besides other pathologic problems(28,1%). We have correlated hematological findings in a nutritive state and serum folate level through RIA with I 125. We have found a high frecuence of Anemia ($\bar{X}$=73,3%) with upper values for the underfeeded (75-82%) in relation with the normal childs (57%),being a significant statistic of difference. The most significant hematological finding ($p < 0,001$) was the presence of hipersegmented polymorphonuclears,only in the bad nutrited population,with an increasing percentage, according to the underfeeding degree. This parameter relates itself directly with de serum folate deficiency (-3 ng%). We have found folic acid deficiency in 68% at the total population, with upper percentages according to the underfeeding degree (II♀=83% and III♀=92%).Among the children with malnutrition the administration of folic acid must be considered as a fundamental part of the therapeutics. The presence of the hipersegmented polymorphonuclears, is a useful parameter,it indicates the folate deficiency,withouth the RIA sensibility.

3 HYPERTENSION IN THE CHRONIC U.H.S. . GRUNFELD B., DEYMONAZ M., MENDILAHARZU J.- Hospital de Niños, Gallo 1330,Buenos Aires (1425) Argentina.

Systemic hypertension is a severe sequelae of the uremic heamolitic syndrome (U.H.S.) and better knowledge of its physiopatholo gy is important for rational therapy, and can serve as a model to compare it with hypertension of other aetiologies. This study includes 43 patients that had the U.H.S. at ages ranging from 1.5 to 16 years, and followed 1 to 14 years after the initial disease. Of them 21 has "persistant" hypertension, 7 had "labile" hypertension, and the 15 normotensives served as a control group. The follow up time was similar in the normo-and hypertensive groups.

Chronic hypertension cannot be predicted by pressure values in the acute stage . Prolongued anuria increases the risk of hyper tension, but its absence does not exclude it. Chronic hypertension can be found with or without normal renal function.Plasma renin activity is increased in 50% of the patients whatever their blood pressure, and with no relation to proteinuria or renal function at any stage.

These findings suggest further research on the natural history of normotensive high-renin cases, an enquiry into the role of vasodilator systems in both groups, and eventually a reapraisal of prognostic and therapeutic criteria.

4 FEMALE PUBERTY IN CHRONIC RENAL FAILURE: PATIENTS WITHOUT DYALISIS. J.R. FERRARIS, H. DOMENE, M. ESCOBAR, M. CALETTI, M. RIVAROLA. Nefrol. Ped.,Htal. Italiano.CEDIE y Nefrol. Ped.,Htal. de Niños. Bs. As. ARGENTINA.

The effect of chronic renal failure (CRF) on the hypotalamic-hypophyso-ovarian axis were studied in 12 patients, aged 9.1 to 17.1 yrs. Serum creatinine (Cr) levels ranged from 2.2 to 17.5 mg/dl. Pubertal development was according to chronological age (Tanner) in all but one patient, and it was coincident with skeletal age in all cases. Patients were grouped by pubertal development as follows: group 1 (stage 1) and group 2 (III, IV and V). Serum estradiol (E_2),LH,FSH and prolactine (PRL) levels were measured.Results: group 1 ($\bar{x} \pm SD$) E_2:8.5 ± 7.5 pg/ml (control 3.5 ± 1.7,N. S.); LH 124 ± 77 ng/ml (21 ± 12,$p<0.1$); FSH 136 ± 80 ng/ml (85 ± 39,$p<0.5$) - Group 2: E_2:25 ± 15 pg/ml (44 ± 20,$p<0.1$);LH 141 ± 48 ng/ml (71 ± 23,$p<0.0005$);FSH 189 ± 70 ng/ml (147 ± 26,$p<0.1$). PRL levels determined in all patients were: 134 ± 90 ng/ml (30 ± 12, $p<0.005$). E_2 levels showed negative correlation with serum Cr.Positive correlation between PRL and Cr was found. E_2 in the low normal range, its negative correlation with serum Cr and the high LH and PRL demonstrate that CRF produce a disturbance in hypophyso-ovarian function. The elevation of LH and PRL levels could be secondary to a diminished metabolic and/or renal clearance or to an increased hormonal secretion.

5 Phenylketonuria in patients with congenital hypothyroidism.Drs.B.J.Schmidt,P.C.Solberg,A.J.Diament & H. Pimentel-Escola Paulista de Medicina,Centro Habilitação APAE,Dept.Neuropsiquiatria,Fac.Med.USP,Inst.Puer.Pediat.Martagão Gesteira,S.Paulo & Rio de Janeiro,Brasil.

21-months-old,female patient,screening tests for inborn errors of metabolism performed at 4 months of age showed congenital hypothyroidism and phenylketonuria.Uneventful pregnancy,parents not consaguineous,birth weight 3650 g,height 50 cm.From the beginning hypotonic,calm,sleeping most time,macroglossy,deglutition difficulties,mixedematous facies,pale,dry and cold skin.Constipation,evacuation every 3 days.Cardiac frequency 96p.m.,smooth and generalized,systolic murmur.Thyroid not palpable.Reducible umbilical hernia.Cough with frequent choking.Rhynorrhoea in the first month and bronchopneumonia in the 3rd.month,requiring intensive care, with heart stop followed by recovery and discharge after 48 hours. T-4=1,4 and 0.7mcg%;phenylalaninemia 33 and 36mg%;TSH 88 µV/ml,I-131 captation absent,tyrosinemia 1.3mg%.Treatment:Cynomel(5mcg/day)and Proloide(16mg/day)increasing gradually up to 60 mg/day (without Cynomel)as well as a diet with hypophenylalanine.The symptoms of hypothyroidism regressed rapidly.Normal weight and height development.Presently slight neuro-psycho-motor retardation(lallation,babling of names,"daddy",mommy",etc;able to stand upright with support and to make 2 to 3 steps).The authors are unaware of any similar case report in the literature.The present note stresses again the importance of populational screening tests in the early detection of inborn errors of metabolism.

6 Isoniazid acetylation in an aymara mixed population from La Paz-Bolivia. TABOADA,G.M.;SERRANO,C.R.;CLAURE,M.L. & GOLDBERGER,R.-Instituto de Genética Humana,Fac.Medicina, UMSA, Hospital del Niño.

The individual rate and velocity of excretion of INH vary according to the genetic structure of human populations.This characteristic corresponds to a bimodal distribution and is autosomally inherited.

Tuberculosis is still the most common infectious disease in Bolivia, and, INH is the most inexpensive anti-mycobacterial drug used in long term therapy.

We are studying an aymara mixed infant and adult population that is under treatment for tuberculosis and are receiving INH.

Our results show that only 44.1% of these patient are slowly inactivators for isoniazid , while, in the United States in caucasoid and negro population they correspond to 92.2% and 93.2% respectively (Evans et al., 1961).