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DIAGNOSTIC VALUE OF DIRECT AGLUTINATION TEST (DAT) IN TOXOPLASMOSIS IN CHILDHOOD. Freilij H., Gómez J., Grinstein S. Virology Unit. Htal. Niños. Bs. As. Argentina.

The results of local experience in serological diagnosis of toxoplasmosis with DAT with and without 2 Mercaptoethanol (2-ME) in a pediatric population are described. Indirect fluorescent antibody tests (IFA) and complement fixation tests were performed in the same samples. 30 serum samples taken from 14 patients and some of their mothers were divided into three groups: a) congenital toxoplasmosis, (3 infants below the age of 6 months); b) corioretinitis probably due to toxoplasmosis, assumed on the basis of type of lesion and serology (5 patients aged 10 to 19 months); and c) acute toxoplasmosis, (6 children aged 3 to 10 years).

Titres obtained with DAT ranged from 1/256 to 1/64,000, and were concordant to clinical data. The fall of titres obtained with 2ME had diagnostic value in 2 patients from group C. IFA showed a similar pattern of results, but it was negative in 1 acute patient with a positive DAT.

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EVALUATION OF THE HYPOPHYSO-GONADAL AXIS IN JUVENILE HYPOTHYROIDISM. Iorcansky Sonia, Cruñeiro de Papendieck Laura, Domene H. and Bergada C. CEDIE. Htal. de Niños. Buenos Aires. Argentina.

Precocious signs of puberty have been reported in some severe hypothyroid patients, suggesting the association of high secretion of gonadotropin with TSH hypersecretion.

Gn-RH was evaluated in: a) 13 patients (9 females, 4 males) with long severe untreated hypothyroidism with precocious puberty according to bone age (range 0-6 6/12) which was 2 SD below chronological to age (range 4 5/12-14 9/12). All females had breast development, only one had pubic hair and 3/9 metrorrhagia. Males presented increased testicular size. Eight/13 patients presented enlarged sella turcica. b) 6 hypothyroid patients (1 female, 5 males) without signs of precocious puberty.

**Results:** Group a) basal and/or serum LH responses were elevated in 12/13. Group b) basal levels of LH were elevated in 4/6. FSH showed high basal levels in 1/6.

**Conclusion:** Primary hypothyroidism with or without signs of precocious puberty frequently presents (16/19) elevated basal levels or LH responses. Elevation of FSH is less frequent. These results suggest that TSH excess would influence gonadotropin secretion.

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HYPOTHALAMIC-PITUITARY-GONADAL FUNCTION AFTER DISCONTINUING CHRONIC TREATMENT WITH MEDROXYPROGESTERONE ACETATE (MPA). María Eugenia Escobar de Lazzari, H. Domene, H. Mora and C. Bergada. CEDIE. Buenos Aires. Argentina.

Eight girls with precocious puberty were studied after discontinuing long-term treatment with M.P.A. (administration period between 1.5 and 6.1 yrs). Breast development appeared between 2 and 6 months and first menstruation between 4 and 34 months of cessation of M.P.A. Seric  $E_2$  levels measured periodically in 4 girls, ranged under treatment between 9-14 pg/ml, and raised 4 to 6 months after treatment was stopped to 30-80 pg/ml. An LH-RH test was performed in 2 cases, after 6 and 10 months of discontinuing M.P.A., with a normal response; a clomiphene test was performed in other two cases, after 2 and 2.4 yrs., with a positive response. After menstruation was initiated, a study of the menstrual cycle (basal body temperature, urocytograms and measurement of seric progesterone - $P_4$ -) in 5 out of 6 patients suggested ovulation, with the following  $P_4$  levels: 7th day = 0.16 to 0.30 ng/ml and 21st day = 10 to 15.2 ng/ml. The other patient showed an anovulatory cycle. These results suggest that chronic treatment with high dose medroxyprogesterone apparently does not produce, after its discontinuation, long-lasting alterations of the hypothalamic-pituitary-ovarian axis.

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PSYCHOLOGICAL STUDY IN PRECOCIOUS PUBERTY. Rotenberg L. & Setian N. Children's Institute, University of Sao Paulo. Sao Paulo. Brazil.

Male and female precocious puberty were studied through clinical and laboratory data. Intelligence and personality were analyzed and family orientation was given whenever necessary.

The psychological study (WISC) shows that these children have superior IQ when compared with other children of same social and cultural conditions. Concerning to the verbal subtests, it became clear that those scores are higher than the ones of the performance subtests, and the similarity subtests' score is above average - meaning a higher intelligence potential as well. The projective tests (Rorschach - Cat) indicated that those children have sexual relationship and body image problems.

Mother's interviews showed also problems with the mother-child relationship, where parents treated the child either as a little adult or by overprotecting them, in spite of their high intellectual potential.

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STUDY OF THE HORMONAL BEHAVIOUR (INSULIN, GLUCAGON AND GROWTH HORMONE) IN 16 CHILDREN DURING THE REMISSION OF THEIR DIABETES. Knopf C.F., Cresto J.C., Dujovne I.L.

Basabe J.C., Sires J.M., Ramos O. de Majo S.F. Bs. As. Argentina. Unidad Endocrinología, Sección Investigaciones, Hospital General de Niños "P. Elizalde".

Twenty two tests were performed in 16 children in remission: 3 of I.V. tolbutamide (I.V.T.T.), 11 of I.V. glucose (I.V.G.T.) and 8 of post-tolbutamide glucose (P.T.G.T.) and in 10 normal children 3 I.V.T.T., 3 I.V.G.T. and 4 P.T.G.T.. Glucose, insulin, glucagon and growth hormone were measured. The glycemic fall (K, Amatzio) was normal in average (2.24) with a range of 1.47 and 3.3. The insulinemia in the remission group was  $9.6 \pm 5.4$  uU/ml, not different from the normal group:  $11.4 \pm 7.3$  uU/ml, but, there were no secretion peaks with any of the used stimuli. The basal glucagonemia in the remission group was similar to normal ( $143 \pm 42$  pg/ml and  $129 \pm 51$  pg/ml) and no modifications were noted after tolbutamide or glucose administration. The growth hormone responses to glucose were normal in the remission group. The studies performed show that the disappearance of the clinical symptoms during remission is not due to an increase in the insulin response to stimuli.

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HISTOLOGICAL AND STEROID STUDIES IN UNDESCENDED TESTIS IN NOONAN SYNDROME. Silvia Gottlieb, H. Chemes, Vilma Dahl and C. Bergada. CEDIE. Hospital Cral. de Niños. Buenos Aires. Argentina.

Six patients (3 prepubertal and 3 post-pubertal) with Noonan's syndrome and cryptorchidism were studied. Testicular biopsies were carried out during surgical correction. One of the prepubertal patients showed a rudimentary testis with increase of the interstitial space. The other two had small seminiferous tubules and decreased germinal cell population. The 3 post-pubertal had larger tubules with variable degrees of spermatogenic development. A few tubules showed a "Sertoli cell only" appearance. 17 $\beta$ hydroxylase activity was evaluated by the conversion of  $\Delta^4$ -androstenedione to testosterone. The values (nM/mg) were: in prepubertal  $7.0 \pm 1.15$  (n=3) and in post-pubertal  $7.33 \pm 0.12 \times 10^{-3}$  (n=2). There was no difference between these values and those of the group of normal children with cryptorchidism. 5 $\alpha$ -hydroxysteroid dehydrogenase was evaluated by conversion to 5 $\alpha$  reduced compounds in both cryptorchid testes of one prepubertal patient; the values were: 5.48 and  $15.34 \times 10^{-5}$  nM/mg. No difference with cryptorchid patients was observed. From the report results it is evident that the testicular features in Noonan Syndrome with cryptorchidism are not different from those observed in normal boys with undescended testis.