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FINAL HEIGHT IN GIRLS WITH PRECOCIOUS PUBERTY TREATED WITH MEDROXI-PROGESTERONE ACETATE (MPA). Boulgourdjian E.;Martínez A.; Escobar María E.;Heinrich J.J. and Bergadá C.

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The inhibitory effects of medroxiprogesterone acetate on clinical features of precocious puberty is well known, but the effects on growth are still controversial. To determine the final heights of patients treated with MPA (150 mg every week) for a period longer than one year (X±SD 3.24±1.85 years) data from a group of 26 girls were analyzed. Chronological age at the onset of treatment was 5.84±2.05 years, bone age was 8.24±2.87 years and the height standard deviation score was 1.56±1.15. Chronological age at withdrawal of treatment was 9.45±0.79 years and bone age 12.95±1.14 years. Attained final height was 155.6±8.06 cm (-1.1 SD of the normal population). In a group of 8 untreated girls with precocious puberty the adult height was 149.2±5.07 cm (-2.16 SD, p 0.02).

In 9 patients in whom treatment was stopped at a bone age equal or below 12 years final height was 159.2±10.05 cm while in 16 girls who had a bone age over 12 years at the moment of the withdrawal final height was 153.3±6.28 cm (p 0.05).

Our data demonstrated the effectiveness of MPA treatment on ultimate height in precocious puberty. The best height observed in those patients who stopped treatment at a bone age lower than 12 years suggests that discontinue therapy before reaching that degree of skeletal maturation may be advantageous.

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TREATMENT OF HYPERINSULINEMIC HYPOGLYCEMIA (HH) DUE TO ISLET CELL DISMATURITY (ICD) WITH RECOMBINANT HUMAN GROWTH HORMONE (rhGH) AND PREDNISONE (PD). Schmitt Lobe M.N.;Boguszewsky M.S.;Kohara S.K.;Sandrini R. and De Lacerda L.

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ICD (included Nesidioblastosis) is not an infrequent cause of HH in infancy. Persistence and/or recurrence of prolonged hypoglycemic states may damage the CNS permanently. A prompt investigation and an agressive therapy are mandatory in most cases. The authors report a case of a 13 months old, white, male boy, with severe hypoglycemic syndrome since the age of 11 months. Clinical manifestations were predominantly neuroglycopenic with two episodes of loss of conscience. Physical examination disclosed a generalized muscle hypotonia, marked psychomotor regression and paleness. Height and weight were in the 10th and 3rd percentiles respectively. Blood chemistry (including pH and gases), T4, TSH, GH, cortisol, EEG, abdominal ultrasound and computarized tomography were normal. Insulin and C-peptide were elevated and insulin/glucose ratios were consistently above 3. Up to the age of 23 months the patient has been hospitalized 10 times for periods of 48 hours, with intervals of 15 to 30 days between each hospitalization. During each hospitalization blood samples have been drawn every 4 hours to measure glucose, insulin, C-peptide, cortisol and Gli; the dosis of the drugs adjusted accordingly. While on 0.2 IU/Kg/day, sc, 2 injections (8 AM, 8 PM) of rhGH and 10 mg/m²/day (10 PM) of PD blood glucose has been always normal. Insulin levels have shown a tendency to higher values. Clinical improvement was significant and no episode of loss of conscience has been reported. Height and weight are in the 25th an 50th percentiles respectively. No cushingoid features are present.

Although the first choice drug to treat this condition has been Diazoxide, and pancreatectomy is reserved for the cases refractory to medical treatment, the association of rhGH with prednisone appears to be a promising therapy, with less adverse reactions.

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CORRELATION BETWEEN IGF-I AND STEROID LEVELS IN THE UMBILICAL CORD OF TERM NORMAL NEW BORN (NB). Osorio MGF.;Mendonça BB.;Cicarconi SM.; Arnhold I.J.P.;Eloise W.;Nicolau W.

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The influence of sex hormones on the IGF-I levels in puberty is well known. Some works correlate intrauterine growth with the levels of IGF-I. Our objective was to analyze the IGF-I levels, Growth Hormone (GH), Insulin (I) and the level of sexual steroids, estradiol (E2), testosterone (T), androstenedione (A), dehydroepiandrosterone (DHEA) and dehydroepiandrosterone sulfate (DHEA-S) in the blood of umbilical cord in 58 normal term NB. Statistical analysis was carried out using the paired Student's t test and the correlation between hormones was done by Pearson correlation.

n	SEX	WEIGHT (Kg)	HEIGHT (cm)	IGF-I U/l	GH ng/ml	I mUI/ml	T ng/dl	A ng/dl	DHEA ng/dl	DHEAS ng/dl	E2 pg/ml
31	M	3.3± 0.4	48.6 ±1.9	0.80 ±0.61	15.1 ±12.7	6.8± 4.5	102± 40	2.4± 1.0	3.2± 2.6	969± 318	3600
27	F	3.2± 0.3	47.6 ±2.2	0.80 ±0.65	16.3 ±11.8	8.1± 6.2	111± 35	4.3± 2.2	3.8± 2.3	862± 411	3600
P		NS	S	NS	NS	NS	NS	S	NS	NS	

We concluded that in the blood of the umbilical cord of normal newborn there is no statistical significant difference between both sexes for the levels of steroid hormones (except androstenedione), GH, Insulin and IGF-I; and that the IGF-I levels do not correlate with any of the parameters analyzed.

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INTRATHYROID THYROGLOSSAL CYST IN CHILDREN. Panteón E.;García H.;Torrealba I.;Téllez R.;Vildósola B.

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The isolate thyroid nodule in children may correspond to cancer; which calls for a systematic study. Differential diagnosis includes follicular or cystic adenoma, teratoma, adn cystic hygroma.

We present two male patients who had visible isolate thyroid nodule, both without family history of thyroid pathology. Ecography disclosed cystic nature. An evacuating puncture released an amorphous milky liquid; the cytological analysis ruled out neoplasia and inflammatory process; in both cases the cyst readly reproduced to its original size. No clinical response was observed to a treatment with T4 2mcg/Kg over 6 months.

	Cyst	Lobe	Punct.	Scintig.	T4	TSH	AAT
Case 1	4x2x3 cm	Left	7cc(2)	cold	8.4	2.1	(-)
Case 2	3xlx2 cm	Right	3cc(1)	cold	7.5	2.3	(-)

Surgery was performed, and it was demostrated that these were intrathyroidal thyroglossal cysts, confirmed by histology, which together with the fistulae were completely removed. In case 1, lobectomy was practised, because it was not possible to separate from the thyroidal tissue; in case 2, cystectomy was performed. In both cases, the rest of the gland was normal in size, aspect and consistency.

This exceptional location of the thyroglossal is discussed according to a revision of the literature.

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CONGENITAL ADRENAL INSUFFICIENCY BY RESISTANCE TO ACTH IN TWO PEDIATRIC PATIENTS. Torrealba I.;García H.;Panteón E.

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Since 1959, only a few cases have been described of congenital adrenal insufficiency by isolate glucocorticoid deficiency of the familial type, in which resistance to ACTH is postulated. We present 2 cases, TNB, females without perinatal pathology, which presented severe hypoglycemia with convulsions in the neonatal period, progressive skin pigmentation, with normal external genitals, normotense, and with normal electrolites during the whole evolution.

	17OHP (ng/ml)	Cortisol (ug/dl) basal	Cortisol (ug/dl) post-ACTH	ARP • (ng/ml)	aldost. (ng/dl)	ACTH (ng/dl)
Case 1	0.85	2.5	2.5	0.5	16.0	78.0
Case 2	1.1	12.5	12.5	0.5	20.6	

Both cases had normal adrenal ultrasound; hypoglycemia decreased readily with the cortisol treatment, and a good pondoestatural increment was observed as well as a reduction of the skin pigmentation after 30 days.

According to what has been reported in the literature, we postulate that the isolate glucocorticoid deficiency found in these two cases is due to a primary defect in the resistance to ACTH, located in the adrenal cortex, characterized by hypoplasia of the zona fasciculata and normality of the glomerulose zone. Although it is nor too frequent, this pathology must be suspected in newborns with hyperpigmentation, convulsions and hypoglycemia without mineralocorticoid involvement, since a timely diagnosis is vital for the adequate treatment.

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SERUM HALF LIFE(HL) OF ENDOGENOUS GROWTH HORMONE (GH) IN NORMAL ADULT MALES (M) AND FEMALES (F). Ciaccio M.;Chaler E.;Maceiras M.;Rivarola M.A. and Belgorosky A.

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It has been reported that the 24-hour integrated concentration of GH is higher in F than in M. These differences should be secondary to different GH production rates provided that metabolic clearances rates (MCR) were similar in the two sexes. To clarify this point, GH HL was studied in 5 F and 4 M. Serum estradiol (pmol/L) was 329±103 and 31.4±29.3 and serum testosterone (nmol/L) 1.63±1.21 and 13.5±2.29 in F and M, respectively. No food was allowed since the previous night. GH secretion was stimulated with a single IV bolus of GH-RH (3 ug/Kg) followed at 30 min of a single IV bolus of 250 ug somastotatin (S). After drawing 3 basal samples every 15 min. Sampling was continued every 5 min for 90 min after GH-RH. GH HL was calculated after S injection when a decrease was found in at least 3 consecutive GH values. Basal GH was not significantly different in the two groups (M:1.15±0.33, F:3.97±4.91 ng/ml) but the maximal increment was lower in M than in F (19.2±8.64 an 43.8±18.6, $p < 0.05$) HL was calculated assuming a monoexponential decay. HL and MCR were not statistically different in M and F (HL:15.2±2.35 and 13.2±2.74 min; MCR:4.77±0.45 and 5.26±0.23 ml/min. Kg, respactively). It is concluded that there are no differences in GH release rate between M and F.