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NONFUNCTIONING PITUITARY ADENOMAS
REVERSIBILITY OF HYPOPI-gitNOMICT SURGERY
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The main indication of surgery in Non Functioning Pituitary Adenoma (NFPA) is the presence of neuro-ophtalmological symptoms. Improvement of pituitary function has been recently emphasized. We reviewed 46 NFPA consecutively operated at Centro di Chirurgia dei Tumori Ipofisari of Bologna from May 1998 through December 2000. All of these were macroadenomas and were resected by endonasal transphenoidal surgery. Mean age was 55 years (17-79); 23 were male while 23 were female. Twenty-six patients complained bitemporal hemianopia; 6 suffered amaurosis; 6 presented cranial nerves palsies and 8 headache. Overall 42 patients had a complete preoperative and postoperative basal hormonal assessment were selected for the study. In the pre operative period 13 showed hypopituitarism, 21 a partial deficit of pituitary function while 8 were asymptomatic. The follow-up period ranged from 6 to 34 months with a mean of 19. We found hypopituitarism in 15 patients, partial defect in 3 and normal profile in 24 patients. Fourteen of the 15 patients showing impairment of pituitary functions after surgery, were recurrence. Eight patients of the 24 cases that recovered normal pituitary functions, were considered normal while 9 other cases showed hyperprolactinemia before surgery. Our study confirm that surgery may improve not only neuro-ophthalmological symptoms, but pituitary functions too. Hyperprolactinemia predict possible recovery of pituitary functions whereas recurrence is poor prognostic factor.

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COMPARISON BETWEEN IGF-II LEVELS IN 26 ACROMEGALIC PATIENTS AND IN 88 NORMAL SUBJECTS
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IGF-II levels increase in chronic GH hypersecretion and are reduced in GH deficiency (GHD) since they reflect the circulating GH levels. The meaning of IGF-II, which is less dependent on GH, remains to be determined. Aim of this study was to investigate the IGF-II levels in GH hypersecretion, and to compare the results with those found in a matched control group (N). ALC, IGFBP-2 and IGFBP-3 were also measured in acromegalic patients. Acromegalics (A): basal IGF-I (151±44 nmol/L), IGFBP-3 levels (198±92 nmol/L) and ALC (470±136 nmol/L) were higher than those found in N (22±4 nmol/L, P<0.0001; 91±29 nmol/L, P<0.0001 and 281±43 nmol/L, P<0.0001, respectively). IGF-II were significantly lower in A: 94±35; N: 111±23 nmol/L, P<0.01), while IGFBP-2 did not significantly differ (A: 8.2±5.8; N: 7.5±5.8 nmol/L, P NS). Considering all the data together, the increase of IGF-I appears higher than that of the binding subunits of the 150 kDa complex, and IGF-II was negatively correlated with IGF-I and ALC (r=0.3, P<0.05; r=0.5 P<0.005, respectively) and positively correlated with IGFBP-2 (r=0.4 P<0.05). In the 9 patients reevaluated after successful surgery, IGF-II levels significantly increased (from 113±41 to 151±50 nmol/L, P<0.001). In conclusion: in active acromegaly, in presence of an excess of IGF-I, the reduced availability of binding sites able to form the 150K complex causes an increase of the metabolic clearance rate of IGF-II. This is confirmed by the finding that the reduction in IGF-I after treatment is accompanied by an increase in IGF-II.