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Drug Dosage
The authors and the publisher have exerted every effort to ensure that drug selection and dosage set forth in this text are in accord with current recommendations and practice at the time of publication. However, in view of ongoing research, changes in government regulations, and the constant flow of information relating to drug therapy and drug reactions, the reader is urged to check the package insert for each drug for any change in indications and dosage and for added warnings and precautions. This is particularly important when the recommended agent is a new and/or infrequently employed drug.

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ACTH-Producing Pituitary Adenomas in Cushing’s Disease

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In the last 8 years we observed 30 patients with ACTH-dependent Cushing’s disease (CD), who were operated upon the pituitary, and 16 patients with Nelson’s syndrome (NS).

CD. (a) In 28 patients with normal or slightly enlarged sella, transsphenoidal exploration of the pituitary was performed. Circumscribed microadenomas could be removed selectively in 26 patients, whereas in 2 patients no adenoma could be detected. Up to now, 19 patients showed clinical and hormonal remission without necessity of long-term hormonal replacement therapy. In the majority of these cases a transitory adrenal insufficiency was documented. In 3 patients with histologically documented microadenomectomy without remission and in the 2 patients without detected microadenoma, a primary hypothalamic origin of CD can be discussed. Preoperative ACTH levels (n = 15) are helpful for the prognosis of operative therapy of pituitary ACTH excess. (b) In 2 patients with larger invasively growing adenomas a radical hypophysectomy and irradiation were performed. 1 patient died because of tumor invasion into the hypothalamus, the other patient is in remission since 3 years.

NS. In 11 of 16 patients with hyperpigmentation, sella enlargement and high ACTH levels after bilateral adrenalectomy, a pituitary operation became necessary. In contrast to the high normalization rate in patients with CD, ACTH levels were normalized in only 3 of the 11 patients with NS, in whom radical hypophysectomy and combined cryo- and radiotherapy were performed.

Conclusions: in the majority of cases with CD, a primary pituitary defect has to be assumed. Therefore sella exploration is the method of choice as the first therapeutical step. It can be assumed, that this therapeutical management of patients with CD may prevent NS in the future.