

RECOGNITION AND PREVENTION OF THE COMPLICATIONS OF ACTH AND CORTISONE THERAPY

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IN THE THREE years which have elapsed since the pituitary adrenocorticotrophic hormone and cortisone became available for general use, numerous reports of their clinical effectiveness have appeared.¹ In general, all reports tend to emphasize the dramatic beneficial effects of these hormones in acute and chronic diseases, many of which have proved refractory to other forms of therapy. Occasionally, with the changing levels of adrenal hormones which accompany ACTH and cortisone administration, undesirable physiological effects are produced. These may appear with the large doses of hormone required to control a pathological process, but more often they are due to doses of hormone which are larger than necessary. Fortunately, in most instances these untoward effects regress on discontinuance of treatment; but even more important is the fact that the majority may be prevented by specific measures and by more careful selection of patients who are to receive ACTH, cortisone or similar hormonal therapy.

It is the purpose of this paper to review some of the complications of ACTH and cortisone therapy and to discuss their prevention and treatment. As an initial approach to the understanding of these complications, the physiological effects of the adrenal steroids will be considered briefly.

PHYSIOLOGICAL EFFECTS

Adrenocorticotrophic hormone (ACTH) is a naturally occurring hormone which is obtained from the pituitary glands of domestic animals. This hormone induces its physiological effects only through stimulation of the adrenal cortex to

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