

Adequate therapy usually produces the following desirable general changes: Temperature, if elevated, usually returns to normal within 6 to 18 hours. Pain is abolished within a short time and becomes an index of the reversibility of the disease under treatment. Patients develop a sense of well-being and of mental activity bordering on euphoria. Fibroblastic proliferation and inflammatory processes are blocked.

Test of Adrenocortical Activity—One of the requisites to successful corticotropin therapy is a functioning adrenal cortex. The functional capacity of the adrenal conditions clinical response. A reduction in the number of circulating eosinophils is considered to reflect increased secretion of adrenal steroids and indicates a positive response to corticotropin. Normal subjects respond to an adequate dose with at least a 50 per cent fall in circulating eosinophils. This test (known as the Thorn test) is applied in the diagnosis of Addison's disease, as a test of adrenal reserve pre- and post-operatively, to determine the patient's ability to react to stress, and to differentiate between panhypopituitarism, functional hypopituitarism and Addison's disease, in hypopituitarism, where hypofunction lies in the hypophysis, reaction to the test is positive. In Addison's disease, where the deficiency resides in the adrenals, the response is negative.

Dosage Considerations—As with corticotropin in gelatin and aqueous corticotropin, the dosage must be individualized to the requirements of the particular patient and the disturbance being treated. Because of the enhanced and prolonged activity, fewer injections are required.

In general, it seems practical to gain initial control of symptoms with an injection of 40 U.S.P. units, (in more severe cases, 60 units) daily. Once symptoms have been controlled, the interval between injections should be increased to 48 hours and then to 72 hours. Thereafter, if symptoms are still controlled, the dose per injection should then be reduced. For maintenance therapy, 20 U.S.P. units (or even less) daily to twice weekly may suffice. The general principle is to give the smallest dose in the longest interval. If the dose needed for full relief produces significant side effects it should be reduced and the physician should content himself with less than full suppression of the disease being treated.

In the treatment of acute diseases, physicians who have had experience with corticotropin-in-gelatin preparations should consider the following dosage suggestions. In view of the fact that this product has an action which is prolonged for at least 24 hours, and in most cases for a longer period, and its activity is at least as great as that of the gel preparations, the initial dose should be the same as that employed per single dose of the gelatin preparation; however, this dose should be given only once in the 24-hour period, and seldom in more than 60 units. The interval between injections should be extended to 48 hours and to 72 hours as soon as expedient, and the dose per injection should then be reduced, as described in the foregoing paragraph.

When immediate therapeutic results are mandatory, as in acute status asthmaticus, it may be desirable for the physician to administer aqueous corticotropin initially by the intravenous route and at the same time to give the first dose of this product intramuscularly into the deltoid muscle. (This product must not be given intravenously.) Once the initial control of the disease have been effected, the patient may be satisfactorily maintained intramuscularly.

Withdrawal of therapy results temporarily in relative adrenocortical deficiency because the patient's own production of ACTH has been suppressed. Withdrawal should be gradual to prevent a rebound reaction of relative deficiency. It is noteworthy, however, that this period of inactivity is usually shorter than that following cortisone therapy.

INDICATIONS

The indications for this product are the same as those for other corticotropin preparations. In general the following dosage schedules have been employed successfully:

In dermatologic disorders (atopic dermatitis, schorrrheic psoriasis, pemphigus vulgaris), dosage has been 40 units every two to four days. Maintenance treatment has in some cases been achieved with 40 units once a week.

In rheumatoid arthritis, dosage in general has been 40 to 60 units per day until control is achieved, then reduced to 20 to 40 units every other day for maintenance. It has been possible in some cases to reduce the dosage even further.

In drug sensitivities, dosage has been 20 to 40 units per day until symptoms are controlled. This dosage has also been employed in the treatment of poison ivy.

In acute lupus erythematosus, dosage has averaged 40 to 60 units or more per