INTRODUCTION AND AIM OF THE WORK

Nutritional oedema is frequently encountered in Egyptian children. Its etiology is a matter of much controversey.

Hypoalbuminemia is a major factor in its pathogenesis. Increased activity of aldosterone, antidiuretic hormone and increased salt and water retention, are probable contributory factors.

Hyperaldosteronism has been postulated in kwashiorkor by its similarity to that occuring in other clinical situations accompanied by oedema. Aldosteronuria had been found in some kwashiorkor cases (Lurie and Jackson, 1962). Some kwashiorkor patients with very enlarged livers exhibited high plasma aldosterone concentration probably due to impaired hepatic degradation of aldosterone (Godard, 1974). Beitins et al. (1974) found an increased plasma aldosterone concentration in kwashiorkor patients with normal aldosterone concentration in marasmus. Worthington et al. (1977) found an increased plasma aldosterone levels in experimental kwashiorkor in monkies and guinea pigs.

Increased plasma renin activity was suggested to contribute to the retention of water characteristic of protein energy malnutrition

(Kritzinger et al., 1972; 1974 and Westhuysen et al., 1975).

The role of renin and aldosterone in the causation of kwashiorkor's oedema receives much attention today, also the facts that kwashiorkor patients often shed their oedema during treatment long before there was any significant increase in their serum proteins (Golden and Golden, 1980), and also blood transfusion does not appeare to hasten the clearance of oedema, supporting the view that factors other than plasma proteins are of importance in oedema genesis (Golden, 1982).

The aim of this work is to investigate the role of renin and aldosterone in the causation of kwashiorkor's oedema by radioimmunoassay of serum aldosterone and serum renin activity, also the determination of serum proteins and serum electrolytes will be done. Cases with various clinical patterns of protein energy malnutrition as well as normal control children will be studied. We hope that this work will throw light on the pathogenesis of oedema in kwashiorkor.