Edema: From Endocrinologist View

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Edema can be an important clue in detecting a few endocrine diseases. In thytotoxic patients, localized pretibial myxedema, puffy eyelids and periorbital circumscribing myxedema in association with exophthalmos are highly specific for the diagnosis of Graves' disease. Pitting edema may be associated to hyperthyroidism related heart failure. In patients with overt hypothyroidism, the characteristic myxedema can by relieved by thyroid hormone replacement therapy. In Cushing's syndrome, either endogenous or iatrogenic hypercortisolism, edema may develop by the sodium retention effect of steroid.

In diabetic patients, edema may manifest in overt diabetic nephropathy which is usually accompanied by macroalbuminuria, hypertension, retinopathy, neuropathy and macrovascular disease. Insulin has a direct antinatriuretic effect on the kidney. In rare cases, insulin edema involving face and extremities may develop when starting insulin therapy. It is usually not severe and goes away in a few weeks. The major side effects of TZD, including rosiglitazone and pioglitazone have been fluid retention with peripheral edema and, in unusual circumstances, congestive heart failure and weight gain. The risk of edema is increased when concomitant administration of TZD and insulin.