Myxedema

Myxedem is an acquired disorder of the structure of the extracellular matrix and connective tissue. Specifically, it is an **increase in proteoglycans and glycosaminoglycans** in collagen fibrous structures. This increase is **generalised**, so it occurs all over the body. Most often in the dermis layer of skin, but also in the myocardium, endocardium, and blood vessels. It develops in thyroid disorders (hypothyroidism, rarely hyperthyroidism) and other endocrine disorders.



A photograph of a middle-aged woman with myxedema. In the right supraclavicular region, there is a visible swelling similar to the so-called ‘fatty tumour’ in cretinism (infantile hypothyroidism). Also there is an evident emotionless face that is typical for myxedema. This is a photograph of a woman seen in Leytonstone, 1885.

Adult hypothyroidism

Since myxedema is characteristic for thyroid dysfunction, we can use it as a synonym for **hypothyroidism in adults**. In the past, the most common cause was lack of iodine in the diet. However, this disappeared after the introduction of iodization of kitchen salt in the 1950s. The **removal of the thyroid gland** (thyroidectomy), whether surgically or radiationally, is now the most common cause, as well as Chronic (autoimmune) thyroiditis (Hashimoto’s). However, myxedema can also be seen in patients with advanced infantile hypothyroidism (cretinism).

Prognosis

Treatment of hypothyroidism is successful. An advanced, particularly untreated myxedema may result in a myxedema coma.

Sources

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