Goitre

Enlargement and swelling of thyroid gland.



Most common causes in the UK

- Grave's disease
- 2. Multinodular goitre NB. multinodular goitres are not felt as nodules, they are smooth (multinodular is an USS diagnosis)
- 3. Physiological goitre (pregnancy/ puberty)
- 4. Others (iodine deficiency, iatrogenic e.g. lithium)

Classification of possible causes

- Diffuse
 - o Simple = euthyroid gland enlargement without inflammation or cancer (e.g. physiological, iodine deficiency)
 - Autoimmune (e.g. Grave's disease, Hashimoto's)
 - o Infective (e.g. acute viral thyroiditis / De Quervains)
- Nodular
 - Multinodular goitre (euthyroid)
 - o Toxic multinodular goitre (hyperthyroid)
 - o Solitary nodule (e.g. cancer, Plummer's solitary nodule)

Investigations

- Thyroid function tests
- Imaging
 - o Ultrasound
 - CT (if retrosternal)
- Needle aspiration
- Biopsy

Complications

- Hyper/ hypothyroidism
- Compression of surrounding structures
 - $\circ \quad \text{Trachea compression} \rightarrow \text{breathlessness}$
 - o Recurrent laryngeal nerve damage → dysphonia
 - Oesophageal compression → dysphagia
 - SVC obstruction → facial swelling, dizziness, headache, blurred vision, syncope
- Cosmetic issues

Management

- Conservative: if patient is euthyroid, reassure
- Medical: make patient euthyroid
 - Hyper: β-blocker (symptomatic), carbimazole (thyroid peroxidise inhibitor), radioiodine-131
 - o Hypo: thyroxine
- Surgical thyroidectomy if:
 - Malignant
 - o Compression of surrounding structures
 - o Cosmetic



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