EXAMINATION OF THE THYROID – A QUICK GUIDE

SYMPTOMS YOU SHOULD LOOK FOR (Browse 3rd Ed, pp 274)

Neck symptoms

Neck lump: Ask all the questions relating to a lump such as: when was it noticed, what made them notice it, is there any symptoms associated with the lump, has it changed ever, does it disappear or reappear, is there other lumps in the body.

Neck lumps are usually painless, but sometimes pain sets in rapidly. This is usually due to haemorrhage into a necrotic nodule. Carcinomas of the thyroid are painless. Always ask about the time frame of the lump, as carcinomas of the thyroid (generally) grow slowly – unless it's anaplastic.

Discomfort during swallowing: Ask if the patient has "discomfort during swallowing". This is different to difficulty in swallowing – dysphagia. The reason for the patient's discomfort during swallowing is because the thyroid needs to be pulled up during the swallowing reflex. Because the thyroid may be enlarged, this makes the "pulling" more difficult – causing the discomfort.

Dyspnoea: Ask if the patient has any difficulty in breathing, at any time of the day. Patient may complain that its difficult to breathe during the night, or when exercising. This is because of the effect of gravity (night), or because the trachea is deviated, therefore causing more turbulence during inspiration/expiration – stridor.

Pain: Painful thyroid lump is not a common feature. Pain can be caused by inflammation of the thyroid gland, and in Hashimotos' thyroiditis. Carcinoma's for our purpose does not cause pain, but this depends on the level of invasion of surrounding tissues.

Hoarseness: This is easily distinguished while you talk to the patient. If the patient has hoarseness, then this is a sinister sign of anaplastic carcinoma. The reason for this is because the carcinoma is infiltrating one of the recurrent laryngeal nerve, therefore paralysing it.

Eye symptoms

Patient may complain of pain in the eye due to corneal ulceration, protruding eyes (thyroid stare), difficult closing eyelids (exophthalmos), double vision due to muscle weakness (ophthalmoplegia).

Peripheral Symptoms

Depending on if the patient has hyper / hypo thyroidism, their peripheral symptoms may be different. Usually, their *Nervous System, Cardiovascular system, & Metabolic and*

alimentary systems are affected. **Always ask about radiation history for thyroid cancers.**

EXAMINATION OF THYROID – A QUICK GUIDE (Browse 3rd Ed, pp 276)

General Inspection

Is the lump in fact a thyroid gland? – Patient swallows glass of water, lump should move. General signs of anxiety, fidgety, obese (myoxoedema)/thin (thyrotoxicosis), hoarseness of voice.

Hands
Pulse: tachycardia / atrial fibrillation (thyrotoxicosis)? bradycardia (myoxoedema)?
Sweating: increased (thyrotoxicosis) / decreased?
Tremor: present (thyrotoxicosis) /absent – hold out arm and fingers spread.

Eyes (is it unilateral / bilateral)
Thyrotoxicosis causes these eye signs.

Lid retraction: check if upper eyelid is higher than normal. Lower eyelid no change.
Lid lag: Ask patient to follow your finger from above downwards. Delay in upper eye lid compared to lower eye lid.

Exophthalmos (retro-orbital fat + cellular infiltration): Is the sclera visible below the lower edge of iris? Ask patient to look up, and see if forehead wrinkles – +ve sign if it does not.

Ophthalmoplegia: Use the "H" test to see if patient has double vision, or difficulty looking in one direction. Could be a sign of cellular infiltration into the muscles and nerves themselves as a result of severe exophthalmos.

Chemosis: Increase in retro-orbital pressure means lymphatic and venous drainage is impeded. Conjunctiva becomes oedematous, thickened, and crinkled.

Mouth
Ask the patient to open their mouth and put out their tongue, while you watch the lump. Does it move during this procedure? If yes → thyroglossal cyst.

Neck Examination (Front)
Inspection
Ask the patient swallow a glass of water and determine if the lump is thyroid related. If it moves upwards upon swallowing, it is thyroid associated.

Inspect the lump and determine its site, size, shape, colour. Is there dilated veins?

Check position of trachea, is it deviated? Can it be felt? (If not, maybe thyroid is extending downwards).

Pemberton's sign: lift both hands above the head and watch for a facial flush. I think this obstructs venous return, therefore arterial blood accumulates, causing the facial flush. (Check this one up and let me know).

Neck Examination (Behind)
Palpation

Palpate the thyroid gland, and determine the following features of it: S3, C3, T4, P, N (p2 of your examination guide). Talk as you go along.

After you have palpated the thyroid, ask the patient to swallow and feel for the lower border of the thyroid gland. Is it palpable? If not, there is retrosternal extension. If so, then "you can get beneath it".

Palpate for the following lymph nodes: Supraclavicular (posterior to medial clavicle), deep cervical nodes (follows IJV, can only be palpate superior and inferior groups), sub mental, submandibular (medial to the mandible bone, feel deep), Pre / Post auricular, Occipital, accessory nerve nodes (follows the accessory nerve, that runs in the posterior triangle of neck).

Neck Examination (Front)
Percussion

Percuss along the clavicles, and along the sternum for extension of the thyroid lump.

Ausculation
Ausculate the gland – check for bruits. Ausculate the trachea – check for a whistling sound – stridor. Ausculate the carotids – bruits (CVS problems).

After the examination

Always state that you would like to go on and perform the cardiovascular and neurological examination, to see for general signs associated with thyrotoxicosis and myxoedema.