S U M M A R Y AND C O N C L U S I O N

SUMMARY AND CONCLUSION

The aetiology of secretory otitis media is still obscure in many of its aspects . The eustachian tube dysfunction is the essential underlying cause in its pathogenesis . Allargy, infection, adenoids and tonsils hypertrophy, misuse of antibiotic therapy in cases of acute otitis media, nasal obstruction, cleft palate , otitis barotrauma, tumours of nasopharynx and radio - therapy in the vicinity of the base of skull are factors usually blamed .

The role of hypothyroidism in the pathogenesis of secretory otitis media is still unclear . It is either forgetten or ignored . Although most text books divide hypothyroidism into a few classical types, such as childhood (Cretinism) and adult myxedema . Werner (1942) contended that mild degrees of hypothyroidism may and do exist which do not came within the above classification .

Clinical diagnosis of hypothyroidism is frequent-ely overlooked ." Between the clinically obvious hypo-thyroid state and the normal there is a kind of no-man's land in which the true or effective level of thyroid activity is not easly decided " , (Reiss and Haigh,1954)

even with the aid of present laboratory methods,there is difficulty to determine the significance of the intermediate values .

The diagnosis of subclinical state of hypothyroidism depends upon awariness of it's presence . Hypothyroidism is characterized by a wide range of non-specific symptoms headed by fatiguability and cold intolerance . The symptoms evoked make for a complaining unwell patient readily buried in the psychoneurtic index . Coarse hair, thick skin, infertility,sluggish mentality and bradycardia may be uniformly indicative of severe hypothyroidism . Unfocalized symptoms like constipation, headache, arthrolagia, chronic fatigue, fleeting sensory disturbances, transient swelling of face or ankles and others may individually or in various combinations suggest moderate hypometabolism.

When the case is sucpected laboratory tests can be obtained . Since hypothyroidism is a systemic illness, it might be expected that pathological changes would develop in the ear,nose and throat . There are certain well documented changes, which do occur in the ear, nose and throat in association with hypothyroidism. These symptoms improve with thyroxine replacement .

Hypothyroidism is sometimes associated with deafness. This may be of the conductive, sensorineural or mixed type. The conductive deafness attributed by McMahon in I947 to mucosal swelling in the eustachian tube which interfered with ventilation of the middle ear . The hearing loss became worse if the oedema involved the mucosa of middle-ear (McMahon, I947) . Catarrhal affections of the middle ear, tubal obstruction, tinnitus with marked hearing disturbances frequently accompanied by giddiness was noted by Laskiewicz (I95I) in cases of hypothyroidism . Ritter (I967) found from an experimental study that the mucosa of the middle ear was thickened and there was effusion in middle ears of 5 rats which made experimentally hypothyroid . Moreover the nasal mucosa is readly affected by the level of thyroxine in the tissues . So in hypothyroidism, nasal obstruction, watery discharge and intermanibale colds are the most common symptoms in hypothyroidism (Proetz, I947) . Ritter (I967) found an increased amount of connective tissue deposited in the submucosa of the septum and turbinates producing nasal obstruction in cases of hypothyroidism . There was also hypertrophy mucous secreting gland to which be attributed the increased amount of nasal drainage . These changes may well interfer with eustachian tube functions and middle ear ventilation.

It has been suggested that the endocrine dysfunction may be one of the factors producing a sympathetic-para-

sympathetic imbalance and that this may lead to development of vasomotor rhinitis in hypothyroid patients (Novak, I927) .

Hypothyroidism can lead to mucoprotenious oedema of the pharynx and recurrent sore throat . It can also lead to lymphatic hyperplasia of the pharynx (Dalton, I948) . Hypothyroidism can affect larynx, the reported changes are oedema and thickening of the laryngeal mucosa due to deposition of acid mucopolysaccharides in the submucosa (Ritter, I967) .

It can thus be concluded that hypothyroidism can produce secretory otitis media in a variety of ways:

I- It can produce oedema of the mucosa of the nasopharynx and eustachian tube (McMahon, I947) .

2- Nasal obstruction, oedema, discharge and interminable colds are frequent complaints in hypothyroidism (Proetz, I947) .

3- It has been shown that hypothyroidism is an important cause of lymphatic hyperplasia of the pharynx (Dalton, I948) . The hypoplastic lymphoid tissue may encroach on the pharyngeal opening of the eustachian tube.

So in recurrent secretory otitis media, or in when the condition is resistant to ordinary treatment, we recommend investigations of thyroid function, specially if the vague symptoms and signs of hypothyroidism are noticed.