

Prevalence of incidental thyroid pathology: Preliminary results of a post-mortem study

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Introduction

Incidental thyroid lesions are diagnosed with increased frequency by sophisticated imaging techniques; however, Sri Lanka lacks data on the prevalence of incidental thyroid pathology. The objective of this study was to determine the prevalence of incidental thyroid pathology in Sri Lanka.

Methodology

Consecutive autopsies of which the death was due to undiagnosed acute diseases or trauma, conducted at the Institute of Forensic Medicine and Toxicology, Colombo, from 2014-2016 were included. Informed written consent and a brief history were obtained from next of kin. Gross examination and microscopic examination of grossly normal and adequately sampled abnormal thyroid tissue was done by a histopathologist.

Results

Data was obtained from 248, including 174(70.2%) males and 74(29.8%) females of which eight were excluded due to unavailability of the thyroid. The mean age was 52.6 years (SD=16.9). None had a history of thyroid disease. One had a family history of thyroid carcinoma. At least one pathology was seen in 136/240(56.7%): papillary microcarcinoma (PMC) in 25(10.4%), colloid

nodules in 72(30%), hyperplastic nodules in 6(2.5%), chronic autoimmune thyroiditis (CAT) in 52(21.7%). PMC was equally prevalent in males (10.5%) and females(10%) with no association with age ($p>0.05$). CAT was diffuse in 31(12.9%) and focal in 21(8.8%). Prevalence of CAT among females (63.4%, 33/52) was significantly higher than males (36.6%-19/52)($p<0.01$). Mean age of having colloid nodules was 59.8 years.

Discussion and Conclusion

The commonest pathology found was colloid nodules. The prevalence of undiagnosed papillary microcarcinoma and chronic autoimmune thyroiditis was considerably high. Similar to other studies, prevalence of chronic autoimmune thyroiditis was significantly higher in females than males. Prevalence of papillary microcarcinoma falls in between the lowest, 0.01% in USA and highest, 35.6% in Finland, reported in literature.