

Thyroid disease in Trinidad

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A 5-year review of 460 consecutive thyroidectomy specimens showed goitrous hyperplasia to be the commonest thyroid disease in Trinidad. The incidence of thyrotoxicosis (19%) is higher than that reported from India and Africa, whereas the occurrence of cancer (4%) is one of the lowest reported.

There is considerable geographical variation in the pattern of thyroid disease¹⁻⁵. The identification of a malignant goitre amidst numerous benign or apparently benign goitres has always been a problem facing the surgeon and surgical treatment is often necessary to exclude malignancy. Thyroid disease is common in Trinidad, our pathology department receiving about two surgical specimens each week. In spite of this there is no report on the pattern of thyroid pathology in the island. The purpose of this study is to document the pattern of thyroid disease in Trinidad.

Material

Between 1976 and 1980 460 patients were operated on for a thyroid mass at the general Hospital, Port of Spain, Trinidad. Data were collected from the pathology records and patients' charts, and all histological material was reviewed to verify the diagnosis. We believe that the

pattern of thyroid disease seen at this hospital is representative of that seen throughout the island as this institution serves over 60% of the population of about 1.2 million.

Results

The primary diagnoses in the 460 thyroidectomy specimens and the age distribution of all cases is shown in Table 1. The age range of the patients was 14-73 years with a majority in the 20-40 age group. There were 396 females and 64 males.

Goitrous hyperplasia was the commonest condition. Nodular goitres were predominant (178 cases) and diffuse colloid goitre was seen in 66 cases. Thyrotoxic goitre was found in 89 cases (19%).

Thyroiditis was classified as Hashimoto's disease when there was diffuse lymphocytic infiltration with germinal centres, small acini depleted of thyroglobin, presence of Askanazy cells and varying degree of fibrosis. 19 cases fulfilled these criteria: 2 were granulomatous thyroiditis and one a Riedel's struma.

Tumours of the thyroid gland were seen in 22% (105) of the cases. Adenomas were five times more common than carcinomas. Most adenomas were of follicular type (78 cases), 4 were Hurthle cell type and one was designated as papillary, where small papillary formations were seen in an otherwise benign follicular adenoma. These adenomas were all single and there was no capsular invasion. Cancer of the thyroid was seen in 22 (4%) cases, predominantly follicular and papillary (Table 2).

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TABLE 1
Age and sex of patients

Age group	Goitre	Adenoma	Thyrotoxicosis	Thyroiditis	Cancer
< 20 yr	8	6	5	1	3
21-30 yr	53	26	38	3	5
31-40 yr	66	32	29	3	2
41-50 r	59	7	9	5	6
51-60 yr	39	7	8	7	5
> 60 yr	19	5	—	3	1
Age range (yr)	14-73	17-69	17-60	17-65	18-64
Females	212	73	77	18	16
Males	32	10	12	4	6

TABLE 2
Cancer of the thyroid gland
(22 patients)

<i>Histology</i>	<i>Male</i>	<i>Female</i>	<i>Age range</i>	<i>Mean age</i>
Follicular carcinoma	2	12	18-64 yr	33 yr
Papillary carcinoma	3	4	27-53 yr	35 yr
Anaplastic carcinoma	1	0	—	53 yr

Discussion

Goitrous hyperplasia is the commonest thyroid disease in Trinidad. Nodular and diffuse colloid goitres formed 53% of all thyroid diseases in our study. In endemic areas goitrous hyperplasia accounts for more than 70% of thyroid swellings; in non-endemic areas this figure is much lower^{1,4}.

Thyrotoxicosis has been noted with increasing frequency in Africa^{4,6}. In our study it formed 19% of the cases. Our population is predominantly of negro and

Indian descent but the incidence of thyrotoxicosis in our surgical specimens is much higher than that reported from India and Africa^{1,2}.

The incidence of cancer in thyroectomy specimens has been reported to vary between 3.3% and 17.1%⁷. An overall operative incidence of 4.25% was noted in a general hospital practice in Birmingham⁸. Our incidence of 4% is one of the lowest, though a similarly low incidence of thyroid cancer has been noted from Uganda and Nigeria^{1,4}.

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