# TUMOURS OF SALIVARY ORIGIN

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The incidence of salivary tumours, particularly that of the pleomorphic adenomata or 'mixed' tumours of salivary origin, varies geographically and racially, as shown by du Plessis<sup>1</sup> and Schulenburg.<sup>2</sup> Though their published figures concerning these tumours do not coincide with the published reports of European and American observers with particular regard to site distribution, Schulenburg<sup>2</sup> points out that the Coloured races are less liable to develop these tumours in the parotid gland, and that they show a correspondingly greater tendency to tumours in other sites.

This paper is an analysis of patients whose salivary tumours were removed and sent to the Institute for Pathology, Pretoria, for histological examination in the 5-year period from 1954 to 1958 inclusive. This analysis brings up-to-date the investigation covering the period 1946 - 1953 made by Schulenburg.<sup>#</sup> In the period under review there are 73 cases of salivary tumours, diagnosed microscopically, and these will be compared with the results of the previous investigation.

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# 'MIXED' TUMOURS

Fifty-seven cases of pleomorphic adenomata occurred in this group of patients and constitute 78% of the total, compared with 81% in the previous series, making a yearly average of 11.4 and 10.5 cases in each series respectively.

#### Age Incidence

In both series it was found that the majority of cases occurred between the ages of 30 and 60 years and particularly in the fifth decade. There were no cases before the tenth year of age and the oldest patient in the present group was a 74-year-old White woman (Table I).

# Site Distribution

Table II shows that, while the majority of tumours occur in the parotid glands, more than half the Bantu patients had tumours in the other sites.

## Race Incidence

There were 23 (40%) White and 34 (60%) Bantu patients with 'mixed' tumours, while there were no Indian or Coloured patients. In the previous series a greater pro-

Age (in years)			1946 - 1953 series	1954 - 1958 series		
			Total	White	Bantu	Total
0 - 10			0	0	0	0
11 - 20		1.1	5	2	4	6
21 - 30			12	2	6	8
31 - 40			22	4	6	10
41 - 50			20	8	7	15
51 - 60			12	3	б	9
61 - 70			6	3	0	3
71 - 80	1.1		2	1	0	1
81 - 90			1	0	0	0
Unknown			4	0	5	5

#### TABLE I. DISTRIBUTION OF 'MIXED' SALIVARY TUMOURS ACCORDING TO AGE, IN TWO SERIES OF CASES

#### TABLE II. DISTRIBUTION OF "MIXED" SALIVARY TUMOURS ACCORDING TO SITE, IN TWO SERIES OF CASES

53.a	1946 - 1953 series	1954 - 1958 series			
Sile	Total	White	Bantu	Total	
Parotid gland	39 (46%)	19	14	33 (58%)	
Submandibular gland	1 16 (19%)	1	8	9 (16%)	
Palate	226 (3192)	1	6	72 (15.5%)	
Other sites	5-0131701	1	1	25 (12 5 /0)	
Not stated	3 (4%)	1	5	6 (10.5%)	

portion of White patients (i.e. 57%) was found, and the difference may in part be explained by the fact that in recent years a private firm of pathologists has become established in Pretoria and has attracted a large proportion of the private practice formerly enjoyed by the Institute for Pathology.

# Sex Incidence

In the previous series a predominance of females was found (55%) in agreement with other investigations, while in this series males predominated in the ratio of 3 : 2 (i.e. 34 males to 23 females).

# Comment

Schulenburg<sup>\*</sup> reported that the 'mixed'-tumour incidence in Pretoria differed from that reported elsewhere and came to the conclusion that the difference lay in the increased incidence in ectopic sites (other than the parotid gland) among the non-White races. The present investigation bears this out but the difference was not as great as previously found.

It was thought to be of little value to consider the occurrence of 'mixed' tumours relative to hospital admissions since only 16 of the 23 White patients were admitted to the Pretoria General Hospital, while an unknown number of patients with salivary tumours admitted to this hospital was examined histologically elsewhere and was thus lost to this investigation. Furthermore, since the number of admissions to the White and non-White wards was roughly equal (approximately 100,000 each in the 5-year period reviewed), it was considered that the actual racial proportions were not adequately represented.

#### OTHER TUMOURS

Sixteen cases, of which 10 were primary salivary carcinomas, formed this group. Cases with carcinoma were distributed over all age groups between 16 and 86 years, males predominated in the ratio of 3:2, the parotid glands were affected in 8 cases, and there were 6 Bantu and 4 White cases.

Apart from the 10 primary carcinomas, the tumours in this group were: papillary lymphomatous cystadenoma, 2; adenolymphoma, 1; adenoma, 2; and oncocytoma, 1.

#### SUMMARY

A further series of 57 cases of 'mixed' salivary tumours and 16 cases of the more unusual forms of salivary tumours has been added to the investigation reported by Schulenburg in 1954.<sup>2</sup> Non-White patients are more frequently affected by mixed tumours of salivary tissue other than the parotid, compared with White patients.

# OPSOMMING

'n Verdere reeks gevalle, bestaande uit 57 ,gemengde' speekselkliergewasse en 16 ander, meer seldsame, gewasse van speekselklier-oorsprong word by die reeks gevalle wat Schulenburg in 1954 gerapporteer het, gevoeg. Daar is ooreenstemming met die bevindings van die vorige ondersoek in die volgende opsigte:

 ,Gemengde'-speekselkliergewasse onder Blankes word hoofsaaklik in die parotisklier gevind, soos elders beskryf.

 In vergelyking met Blankes kom .gemengde'-speekselkliergewasse by nie-Blankes meer dikwels voor in ander gebiede as die parotisklier.

 Gewasse van speekselkliere kom seldsaam by kinders voor. maar veral by 30 - 60-jarige persone.

#### REFERENCES

- 1. du Plessis, D. J. (1950): 'Mixed Salivary Tumours'. M.Ch. Thesis,
- University of Cape Town.
- Z. Schulenburg, C. A. R. (1954); S. Afr. Med. J., 28, 910.