

MALIGNANT ORAL TUMOURS IN PENINSULAR MALAYSIA — A Preliminary Report on 2,263 cases

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INTRODUCTION

MALIGNANT oral tumours kill more people than all the other serious oral conditions added together. It is indeed interesting to note from this preliminary study that the various histological types of malignant oral tumours have variations in the relative frequency, race, sex, peak age incidence, anatomical sites of involvement, morbidity and long-term survival of patients.

MATERIAL AND METHOD

This study was based on the records of the Department of Stomatology and for the years 1967 — 1978. Only histologically confirmed cases were included in this study. Malignant oral tumours formed about 22.5% of all specimens reported by the department. In all there were 2,263 patients. The male:female ratio was 1.2:1.

RESULTS AND DISCUSSION

Table I shows the frequency of malignant oral tumours by histological types. Squamous cell carcinoma (91%) was the commonest malignant oral tumour. Carcinoma was about 20 times more common than sarcoma. Sarcomas formed about 5%. Malignant minor salivary gland tumours formed about 4%. Malignant melanoma (Fig. 1) formed 0.3%. The peak age incidence for malignant melanoma was between 31-40 years (37.5%) and the commonest site of involvement was the lips (37.5%). The relatively low figure (0.2%) for metastatic carcinomas to the oral cavity could be due to cancer patients often seeking

treatment very late and having a rather short survival period even following treatment.

Since the Department of Stomatology has already published several papers on the various aspects of oral squamous cell carcinoma, for economy of space the discussion will be limited to the other types of malignant tumours.

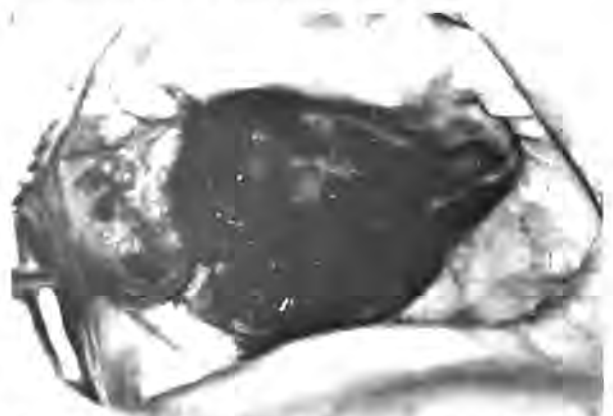


Fig. 1. shows a malignant melanoma of the hard palate presenting as a pigmented black lesion with evidence of haemorrhage.

TABLE I
Frequency of Malignant Oral Tumours
(1967 — 1978)

TYPE	NUMBER	PERCENTAGE
Squamous Cell Carcinoma	2056	90.9%
Malignant Minor Salivary Gland Tumours	88	3.9%
Malignant Melanoma	8	0.3%
Metastatic Carcinomas	5	0.2%
Sarcomas	106	4.7%
	2263	100%

CARCINOMA: SARCOMA = 20.3 : 1

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MALIGNANT MINOR SALIVARY GLAND TUMOURS

Patients with malignant salivary gland tumours (Fig. 2) commonly presented as a firm swelling with evidence of ulceration and pain. In all there were 88 patients. Both sexes were equally affected. Mucoepidermoid tumour (Fig. 3) (40%) was the commonest followed secondly by adenoid cystic carcinoma (34%) Table 2. Eighty percent of the patients were between 31 — 70 years. About 7% of malignant minor salivary gland tumours occurred between 11 — 20 years. All of them were females with 83% of them being Chinese females. This would emphasize the need for clinicians to exclude malignant minor salivary gland tumours in Chinese female adolescents presenting with firm swellings in the mouth. Malignant minor salivary gland tumours most commonly involved the palate (40%), gingivae (25%) and the cheek (19%).



Fig. 2. shows a malignant minor salivary gland tumour of the hard palate presenting as a firm swelling with evidence of ulceration.

Table II

Distribution of Malignant Minor Salivary Gland Tumours by Historical Types (1967 — 1978)

	NUMBER	PERCENTAGE
1. Mucoepidermoid tumour	35	39.8%
2. Adenoid Cystic Carcinoma	30	34.1%
3. Adenocarcinoma	16	18.2%
4. Carcinoma in Pleomorphic Adenoma (malignant mixed tumour)	6	6.8%
5. Undifferentiated carcinoma	1	1.1%
Total:	88	100%

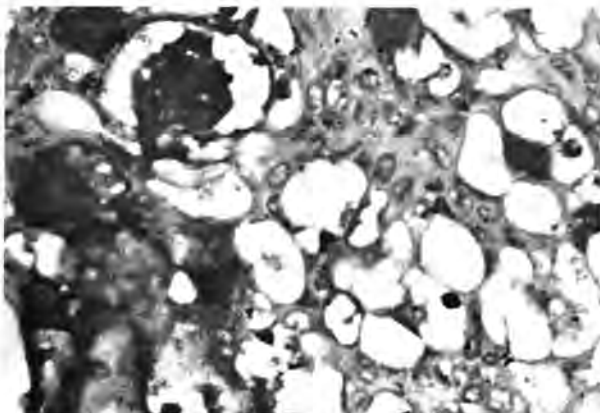


Fig. 3. A high-power (original magnification x 160) photomicrograph of a mucoepidermoid tumour showing (1) mucous cells (2) clear cells and (3) epidermoid cells. Mucicarmine stain.

MALIGNANT LYMPHOMAS

Malignant lymphomas formed about 3.0% of all malignant oral tumours. Reticulosarcoma (43%) (Fig. 4, 5) was the commonest malignant lymphoma, followed by Burkitt's lymphoma (30%) and lymphosarcoma (25%). Malignant lymphomas were more common in males. The peak age incidence for reticulosarcoma was between 51-60 years (35%). The male:female ratio for reticulosarcoma was 3.1:1. Burkitt's lymphoma (Fig. 6, 7) is the commonest malignant oral tumour in children in Peninsular Malaysia (Ramanathan and Tan Cheng Keat, 1972). The peak age incidence was between 0 — 10 years (70%) and almost 95% of the patients were between 0 — 20 years (Ramanathan, K. In Press). Ramanathan has emphasized that Burkitt's lymphoma is much more common than it has been reported so far. The male:female ratio for Burkitt's lymphoma was 2.3:1. Lymphosarcomas had two peak age incidences. Firstly between 0 — 10 years (35%) and a second peak between 31 — 40 years (29%). The male:female ratio for lymphosarcoma was 1.8:1.

OTHER SARCOMAS

There were 15 cases of fibrosarcoma forming 0.7% of all malignant oral tumours. Fibrosarcoma was three times more common in the male. The peak incidence was between 21 — 40 years (40%). There were five cases of osteosarcoma forming about 0.2% of all malignant oral tumours. Except for a Malay female all the other patients were males. The peak age incidence was between 21 —

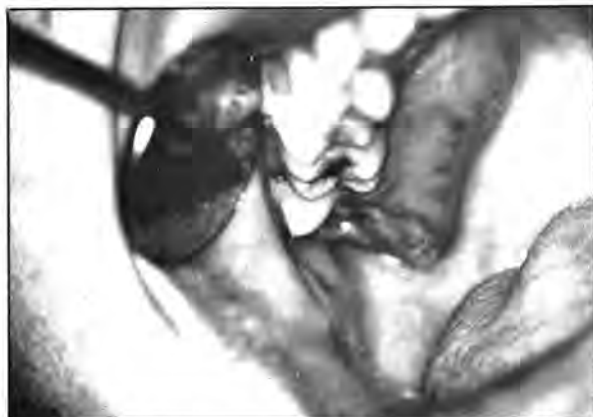


Fig. 4. shows a reticulosarcoma of the palate presenting as a soft tissue swelling.

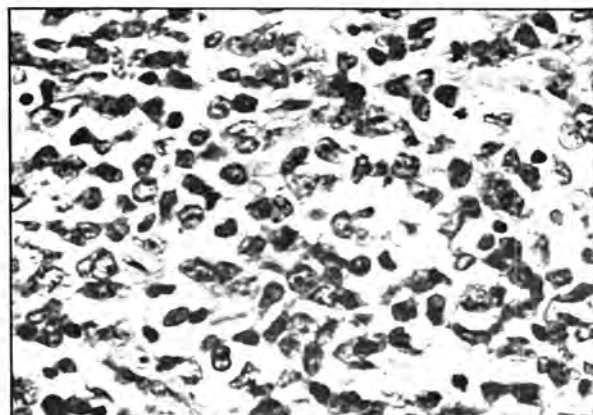


Fig. 5. A high-power photomicrograph (original magnification x 160) showing a sheet of reticulum cells with abundant pale-staining cytoplasm and indistinct cell borders. The nuclei are usually lobular or indented and have prominent nucleoli. H & E.



Fig. 6. A 2-year-old Chinese girl with Burkitt's lymphoma involving both quadrants of the maxillae and the right quadrant of the mandible.

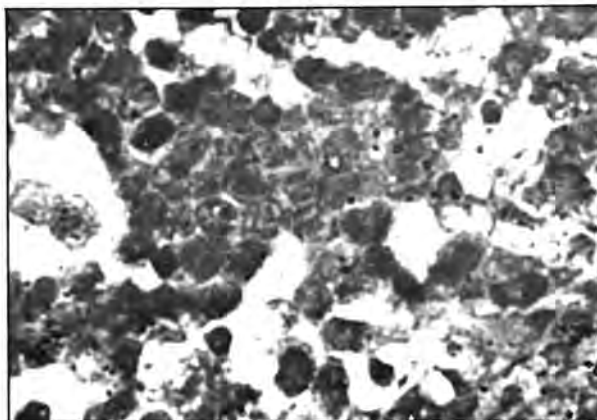


Fig. 7. A high-power photomicrograph (original magnification x 160) shows a monotonous distribution of undifferentiated lymphoreticular cells with little variation in size and shape. The non-neoplastic histiocytes with abundant clear cytoplasm contain tumour cells or cell debris. H & E.

30 years. (60%). There were four cases of malignant haemangioendothelioma, 3 cases of malignant haemangiopericytoma and 3 cases of Kaposi's sarcoma. Eighty-two percent of patients with angiosarcomas were between 0 — 30 years. Angiosarcomas were three times more common in the male. There was also one case each of alveolar soft-part sarcoma, rhabdomyosarcoma, plasma cell myeloma and neurofibrosarcoma.

SUMMARY

Malignant oral tumours formed about 23% of all oral pathology specimens. Squamous cell carcinoma (91%) was the commonest malignant oral tumour. Carcinoma was about 20 times more common than sarcoma. Malignant minor salivary gland tumours formed about 4%. There is a need for clinicians to exclude malignant minor salivary gland tumours in Chinese female adolescents presenting with firm swellings in the mouth. Reticulosarcoma was the commonest malignant lymphoma, followed by Burkitt's lymphoma and lymphosarcoma. Burkitt's lymphoma is the commonest malignant oral tumour in children in Peninsular Malaysia. Lymphosarcomas had two peak age incidences. Firstly between 0 — 10 years and a second peak between 31 — 40 years. Fibrosarcoma, osteosarcoma and angiosarcoma mostly occurred in the young adults.

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