

# Management of Deep Lobe Benign Parotid Tumours in University Hospital Dorset- An experience of more than 11 years

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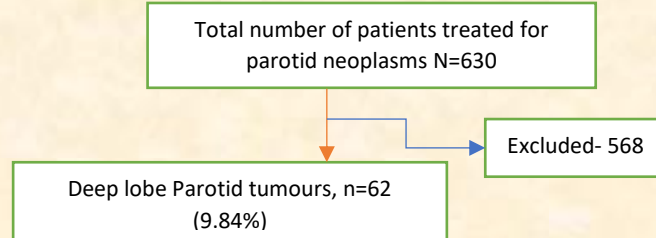
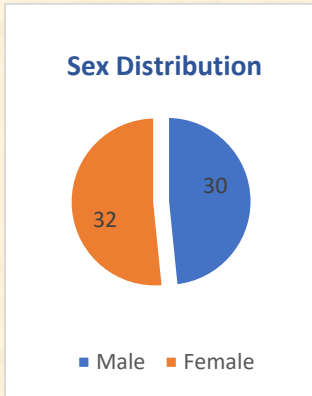
**INTRODUCTION-** Deep lobe tumours of parotid gland are a rare entity with the reported incidence in literature ranging from 1% to 11% in major case series<sup>1,4</sup>. Their diagnosis and management remain a challenge due to their uncommon nature.

## OBJECTIVES-

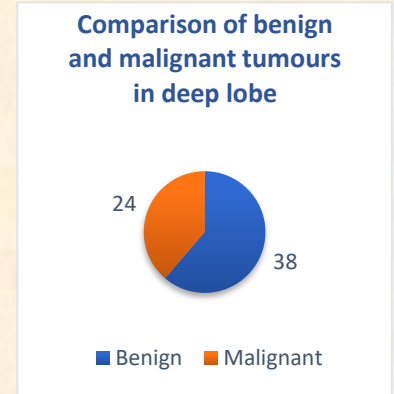
To evaluate the incidence and demographics of benign deep lobe parotid tumours in a major head and neck centre in Dorset, United Kingdom. To determine the various modes of investigation and management used, and complication rates.

**MATERIALS AND METHODS-** Retrospective review of electronic patient records of 630 patients treated at University Hospitals Dorset from 01.01.2009 to 14.05.2020 for parotid gland neoplasms.

## RESULTS-



- Age Range- 20-95 years (62.61 years)
- Duration to presentation- 2 weeks up to 20 years



Presenting Complaint	n
Painless preauricular mass	32
Painful preauricular mass	7
Parapharyngeal mass	1
Facial palsy with or without obvious mass	7
TMJ pain/ Limited mouth opening	3
Numbness of lower lip/earlobe	4
Dysphagia	1
Incidental finding on MRI	11

Investigations n (%)	
USG	62 (100%)
MRI	60 (96.77%)
Staging CT	24 - All malignant cases
PET	4 - 16.66% of malignant cases

Histology of benign tumours	n
Pleomorphic Adenoma	26
Warthin's tumour	8
Basal cell adenoma	2
Benign oncocytoma	1
Recurrent Epithelioma	1

## CONCLUSION

- The incidence of deep lobe benign and malignant tumours is 9.84%.
- Benign and malignant tumours of deep lobe tumours constitute 6.03% and 3.81% of all parotid neoplasms respectively.
- 100% of the patients in our series had ultrasonography and 96.77% had MRI scan as cross-sectional imaging. Only 16.66% of malignant cases had PET scan.
- 66.13% of cases were discussed in a multidisciplinary team meeting, including all the malignant cases.
- FNAC and core biopsy were used for initial diagnosis, with a sensitivity of 79.16% and 83.33% respectively in detecting malignancy of deep lobe tumours.
- Majority of tumours required transcervical approach for resection. 9 cases (14.51%) had either an access osteotomy or mandibulectomy as part of the resection to approach the tumour in the deep lobe. Facial nerve palsy was the most common complication (40.32%).
- In view of delayed presentation of conventional deep lobe tumours, with 17.74% being discovered on incidental MRI, PET scan can be a useful modality for detecting malignant focus.
- Access osteotomy to avoid spillage and complete R0 resection are recommended when covert malignancy cannot be excluded.
- We recommend a multicentre study to evaluate these uncommon tumours and to propose a pathway for their management.

	FNAC n=55	Core Biopsy n=17
Benign	39 (False negative malignant-5)	5 (False negative malignant- 3)
Malignant	14	12
Sensitivity to detect malignant focus	79.16%	83.33%

Histology of malignant tumours	n
Carcinoma ex pleomorphic adenoma	4
Mucoepidermoid Carcinoma	3
High Grade Adenocarcinoma	2
Poorly differentiated Adenocarcinoma	2
Adenoid Cystic Carcinoma/Salivary ductal carcinoma	2
Squamous cell Carcinoma	2
Undifferentiated carcinoma	2
Epithelial myoepithelial carcinoma	2
Oncocytic Carcinoma	1
Poorly differentiated adenocarcinoma with focus of Carcinoma ex pleomorphic adenoma	1
Myoepithelial carcinoma	1
Metastatic Renal Cell Carcinoma	1
Acinic Cell Carcinoma	1

## REFERENCES

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