

A Moroccan Chu's Experience with Salivary Gland Tumors

Hind Rachidi ¹, Imane Boujguenna ^{2*}, Asma Lahouaoui ¹, Abdeljalil Ouaziz ¹, Nawal Cherif Idrissi Guannouni ³, Sara Ouassil ³, Abdelaziz Raji ⁴, Hanane Rais ¹

¹Department of Pathological Anatomy, Arrazi Hospital, University Hospital of Mohammed VI - Marrakech / Faculty of Medicine and Pharmacy of Marrakech - Cadi Ayyad University Marrakech/Morocco.

²Guelmim Faculty of Medicine and Pharmacy - Ibn Zohr Agadir University Guelmim- Morocco 81000.

³Department of Radiology, Arrazi Hospital, University Hospital of Mohammed VI - Marrakech / Faculty of Medicine and Pharmacy of Marrakech - Cadi Ayyad University Marrakech/Morocco.

⁴Department of Otorhinolaryngology, University Hospital of Mohammed VI - Marrakech / Faculty of Medicine and Pharmacy of Marrakech - Cadi Ayyad University Marrakech/Morocco.

*Corresponding Author: Imane Boujguenna, Guelmim Faculty of Medicine and Pharmacy - Ibn Zohr Agadir University Guelmim- Morocco.

Received Date: February 28, 2025; Accepted Date: March 10, 2025; Published Date: March 17, 2025

Citation: Hind Rachidi, Imane Boujguenna, Asma Lahouaoui, Abdeljalil Ouaziz, Idrissi Guannouni NC, et al, (2025), A Moroccan Chu's Experience with Salivary Gland Tumors, *J. Cancer Research and Cellular Therapeutics*. 9(2); DOI:10.31579/2640-1053/233

Copyright: © 2025, Imane Boujguenna. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Abstract

Choroidal melanoma (CM) is malignant neoplasm of melanocytes in choired. It is the most common intraocular malignant neoplasm in adults. The diagnosis is based on histological and immunohistochemical examination. These tumors have a pejorative prognosis and their evolution is marked by the appearance of metastases especially in the liver. Currently, the development of genomic analyzes has led to a better understanding of the molecular mechanisms involved in oncogenesis. Therapeutic management has become much more difficult since the appearance of conservative treatments to keep the eye. We report a new case of choroidal melanoma in a 29-year-old patient diagnosed at the pathology department of the Mohammed VI CHU (Marrakech, Morocco). The aim of this work is to study the anatomo-clinical and evolutionary aspects of this infrequent entity

Keywords: melanoma; choroid; histology; immunohistochemistry

1. Introduction

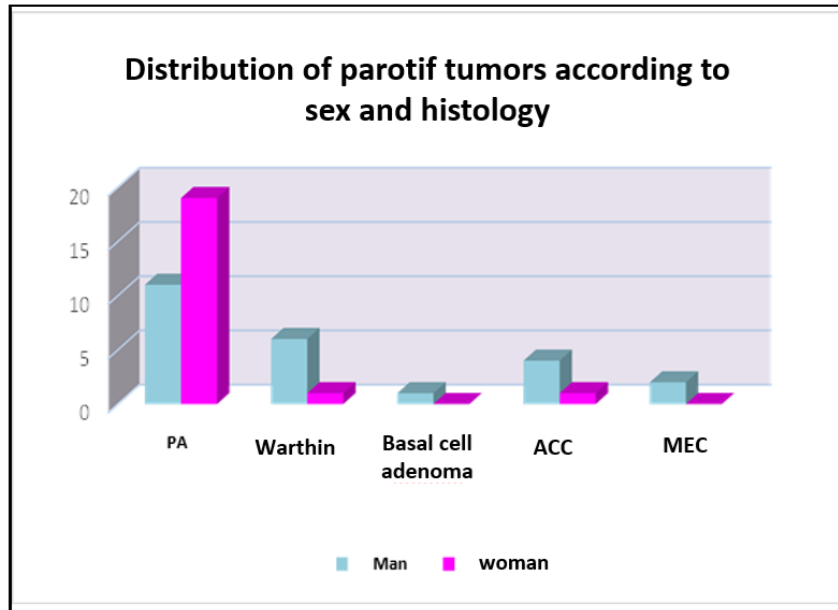
The salivary gland tumors (SGT) are very different: The OMS 2017 classification recognized 24 subtypes of cancer and 12 subtypes of benign tumors (1). Three 3% of all body tumeurs and 6% of head and cou tumeurs are represented by them. Pléomorphe (AP) is the most common histological type, and parotidienne tumors predominate in their frequency (2,3). Epidemiological data are quite variable, according to studies (4–5). Establishing an epidemiological profile of salivary gland tumors in a Moroccan environment and comparing it to data from the literature were the goals of this retrospective study.

2. Patients et Methods

This is a retrospective study that was carried out over a 16-year period, from January 2008 to September 2024. A total of four venomous patients were taken in charge of a salivary gland tumor. Tumors have been categorized in accordance with OMS 2022 (1). The following factors have been examined: age, sex, location, and histological type of tumors. The EPI INFO 6.0W software was used to collect, code, and analyze all of the data.

3. Results

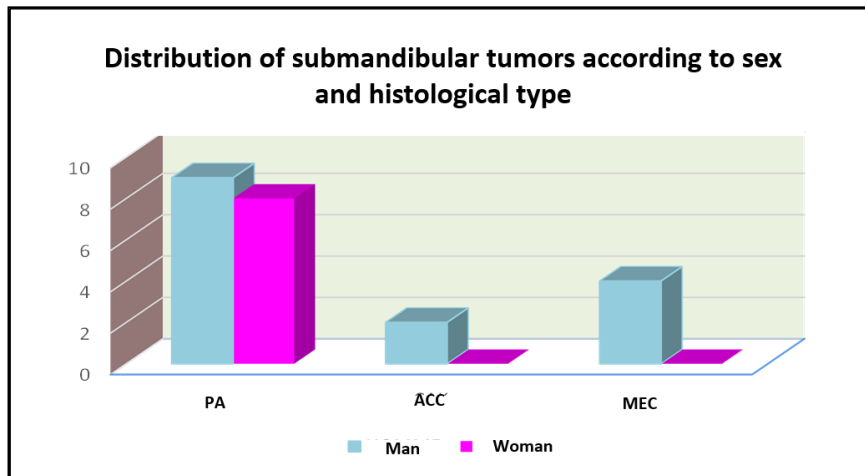
There were 42 women and 54 men in the group ; the sex ratio was 1.28, with a little male preponderance. The average age was 42 years old, with extremes ranging from 14 to 83 years old. Forty-five percent of the tumors were parotidiennes, twenty-eight percent were located at the level of the accessory salivary glands, and twenty-three percent were submandibulaires. Eighty-four percent of parotidienne tumors were benign. With an average age of 39 years (14–83), AP accounted for 66.66% of bénigne tumors, followed by cystadénolymphome (CAL) or Warthin tumors, which accounted for 15.55%. The remaining bénigne tumors accounted for 2.22 percent of the cases (fig. 1). The most common malignant form, accounting for 71.42% of cases, was adenoid kystique cancer (CAK), which was followed by mucoépidermoïde cancer, which accounted for 40% of cases.



PA: Pleomorphic adenoma - ACC: Adenoid cystic carcinoma - MEC: Mucoepidermoid carcinoma

Figure 1: Distribution of parotid tumors by sex and histological type

Seventy-three percent of submandibular tumors were bénignes (figure. 2), which were only identified by the term pléomorphe. The CME and CAK represented 66.66% and 33.33% of malignant tumors, respectively.



PA: Pleomorphic adenoma - ACC: Adenoid cystic carcinoma - MEC: Mucoepidermoid carcinoma

Figure 2: Histological type and sex-specific recurrence of tumors under mandibularies

The tumors of the accessory salivary glands (ASG) were all benign and mostly settled at the 70% palatin level. The other locations were the lèvres (8%), the plancher buccal (12%), and the play (10%).

Nature	Histological Type	Cases number
Benign tumors (87%)	Pleomorphic adénoma	75
	Cystadénolymphoma	7
	Basal cell adenoma	1
Maligned Tumors (13%)	adenoid cystic carcinoma	7
	mucoépidermoid carcinoma	6

Table 1: Distribution of salivary gland tumors by histological type

The histological diagnosis was performed on biopsy in 19.1%, on surgical specimen in 46.8%, and on excisional biopsy in 34% of cases. The immunohistochemical study was performed in 11% of the cases. Six cases of recurrence were observed, including three pleomorphic adenomas, one CAK, and one Warthin's tumor.

4. Discussion

The average age of occurrence of salivary gland tumors in our context is 42 years, which is consistent with the data in the literature [4,6,8,9]. There is variability in the overall sex ratio according to studies, with either

a male predominance as in our study (7), a female predominance [4,6,8], or no sexual predominance [9].

In our study, the parotid location is the predominant one (46.87%), which corresponds to the data in the literature where Parotid involvement ranges from 50 to 83%, submandibular involvement from 5 to 25%, and ASG involvement from 3.2 to 33% [5,6,8,9].

In our series as well as in the majority of studies, salivary gland tumors are most often benign and rarely malignant (Table 1). Malignant tumors occur at an older age [9], and affect men more than women [6,7]. Which is consistent with the results of our study.

Pleomorphic adenoma is the most common benign tumor in our study as well as in other studies in the literature. it most often occurs in women and at a young age (3,5,6,10) Cystadenolymphoma is almost exclusively

parotid and represents 5 to 12% of benign salivary gland tumors [10]. In our study, its percentage has slightly increased, reaching 16.66% of our patients.

MEC and ACC are the most common malignant tumors of the salivary glands. CME represents approximately 16% of salivary gland tumors, 44% of malignant tumors [10]. In our study, we note a lower percentage of MEC (4.16%). The CAK represents 5 to 10% of salivary gland tumors, which is consistent with our results.

5. Conclusion

Salivary gland tumors represent a heterogeneous group of diseases with complex characterization and variable frequency.

6. Iconography

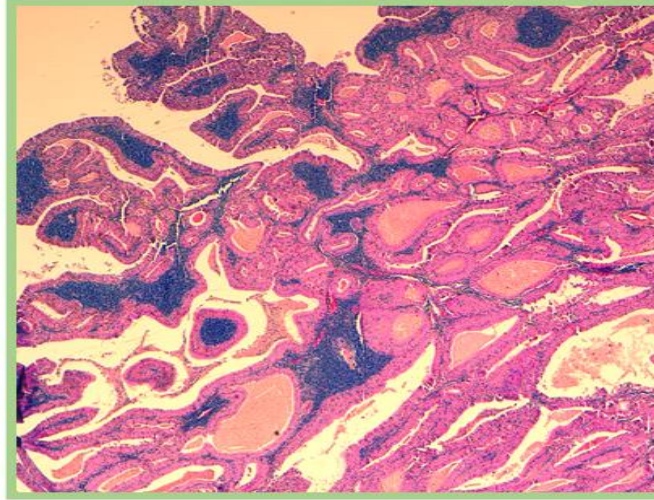


Figure 1: (HE*20): benign tumor proliferation of the parotid gland arranged in tubes, often cystic, suggesting a Warthin tumor

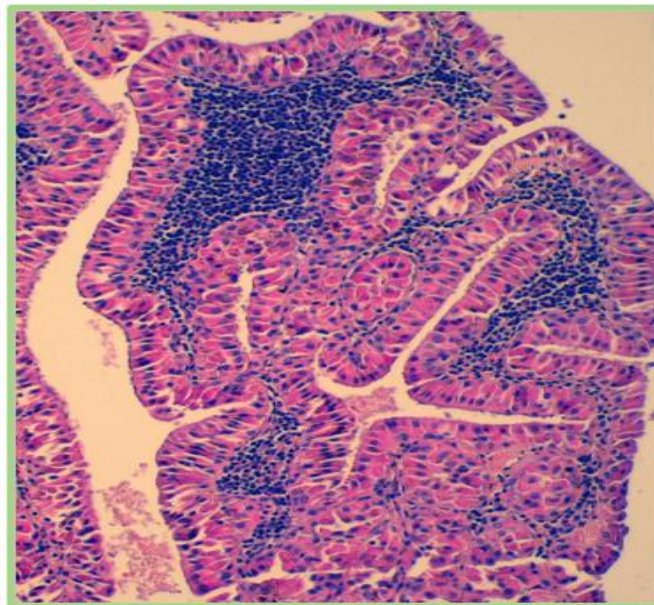


Figure 2: (HE*40): benign tumor proliferation of the parotid gland arranged in tubes, often cystic, suggesting a Warthin's tumor

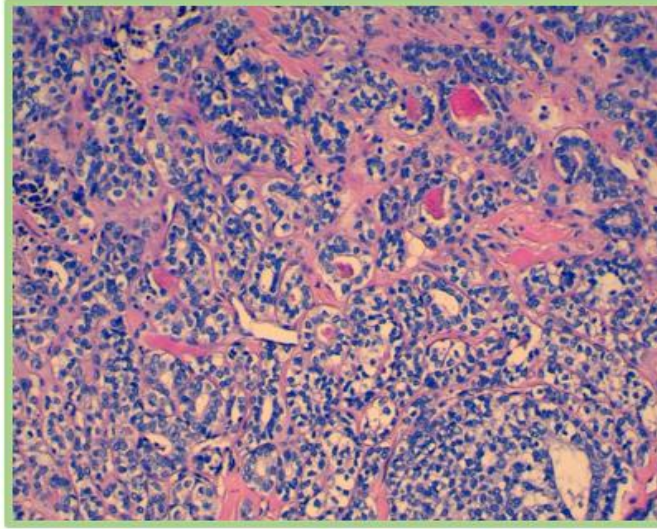


Figure 3: (HE*20) High-grade infiltrating adenoid cystic carcinoma of the parotid gland in a 70-year-old patient.

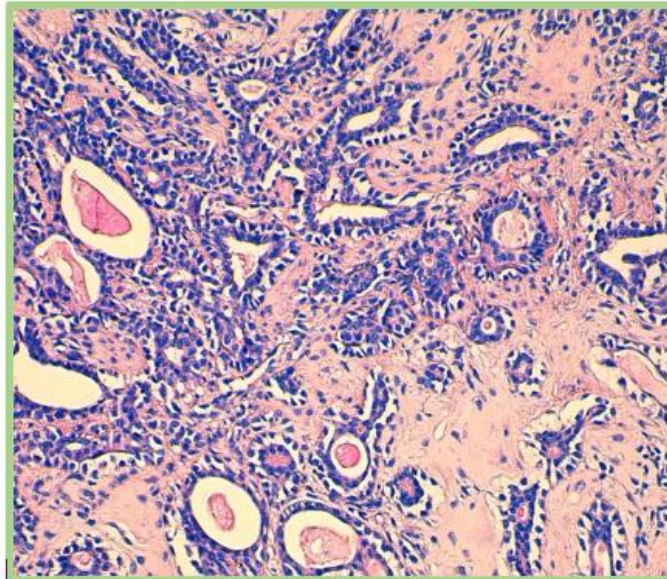


Figure 4: (HE*40) High-grade infiltrating adenoid cystic carcinoma of the parotid gland in a 70-year-old patient.

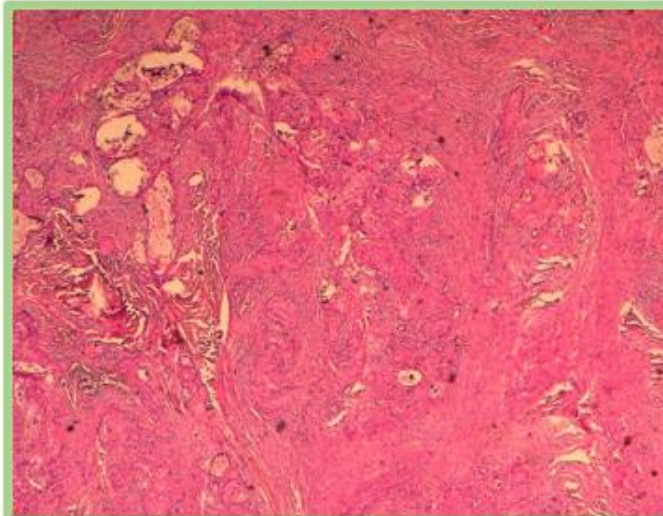


Figure 5: HE*4 infiltrating mucoepidermoid carcinoma affecting the parotid gland.

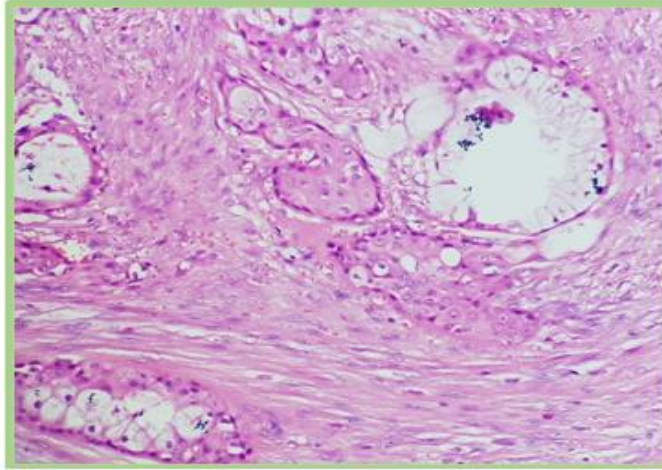


Figure 6: HE*40 infiltrating mucoepidermoid carcinoma affecting the parotid gland.

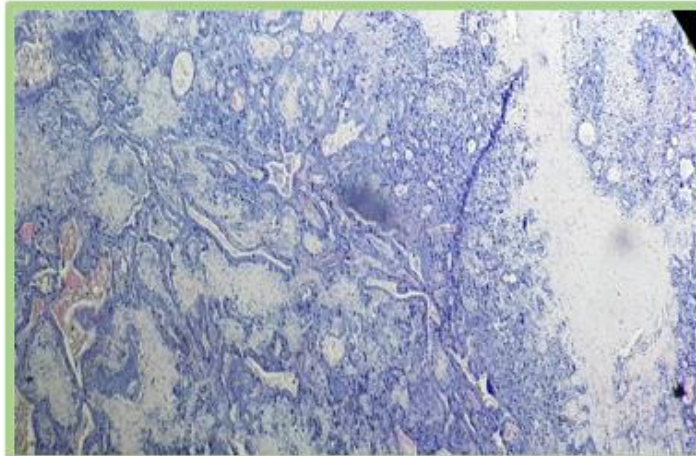


Figure 7: HE*4 benign tumor proliferation suggesting a pleomorphic adenoma of the parotid gland.

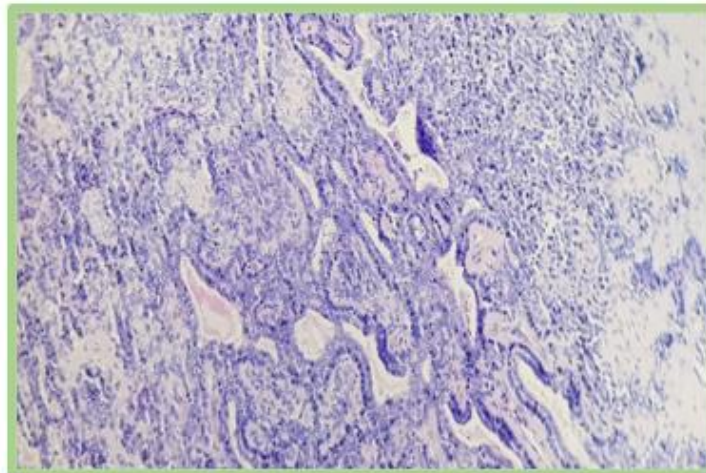


Figure 8: HE*20 pleomorphic adenoma of the parotid gland.

Conflicts of interest

The authors declare that they have no conflicts of interest.

Authors' contributions

All authors contributed to the writing of this manuscript.

Consent to publication

Written informed consent has been obtained from the patient for the publication of this case report and all accompanying images. A copy of the written consent is available for review by the editor-in-chief of this journal.

Financing

The authors did not receive any specific funding for this study.

References

1. Barnes EL, Eveson JW, Reichart P, Sidransky D (2022), Pathology and genetics of head and neck tumours. World Health Organization classification of tumours. Lyon: IARC Press.
2. Martin Negrier ML, Rivel J, Vital C, Pinsolle J. (2020), Carcinome oncocytaire de la glande parotide. *Ann Pathol*; 11:359–362.
3. Spiro RH, Dubner S. (2000), Salivary gland tumors. *Curr Opin Oncol*; 2:589–95.
4. Kayembe MK, Kalengayi MM. (2002), Salivary gland tumours in Congo (Zaire). *Odontostomatol Trop*; 25:19–22.
5. Satko I, Stanko P, Longauerova I. (2000), Salivary gland tumours treated in the stomatological clinics in Bratislava. *J Craniomaxillofac Surg* 28:56–61.
6. Nagler RM, Laufer D. (1997), Tumors of the major and minor salivary glands: review of 25 years of experience. *Anticancer Res* 17:701–707.
7. Barnes L, Eveson JW, Reichart P, Sidransky D, (2005), World Health Organization classification of tumours. Pathology and 10genetics, head and neck. IARC Press: Lyon; p. 209–281.
8. Ouoba K, Dao M, Sakandé B, Kabré M, Cissé R, et al. (1998), Les tumeurs des glandes salivaires. A propos de 48 cas chirurgicaux. *Dakar Med*;43:60–64.
9. Ben Romdhane K, Marrakchi R, Sioud H, Ben Ayed M. (1987), Les tumeurs des glandes salivaires. A propos de 93 cas. *Tunis Med*; 65:681
10. Pinkston JA, Cole P. (1999), Incidence rates of salivary gland tumors: results from a population-based study. *Otolaryngol Head NeckSurg*;120: 834–840.
11. Vo-Ngoc H, Dellagi K, Marandas P, Micheau C, (1994), Myoepitheliome.A propos d'un cas. *Ann Pathol*; 14:112-115.
12. Spiro RH, Koss LG, Hajdu SI, Strong EW. (1973), Tumors of minor salivary origin. A clinicopathologic study of 492 cases. *Cancer*; 31:117–129.
13. Piette-Reychler E. (1991), Pathologie des glandes salivaires. In: Traité de Pathologies Buccale et Maxillofaciale. De Boeck Université : Bruxelles. 1085–1160.
14. Romain P, Desphieux JL, Legros M, Hannion X, Schwartz H, Diebold MD. (1989), Adénocarcinome occulte de la parotide. A propos de 2 cas. *Rev Stomatol Chir Maxillofac*; 90:123–130.
15. Chomette G, Auriol M, Biaggi A, Vaillant JM. (1992), Une le'sion lymphoépithéliale maligne salivaire avec carcinome épidermoïde peu différencié. A propos d'un cas. *Rev Stomatol Chir Maxillofac* 93:85–88.
16. Auclair PL, Langloss JM, Weiss SW, Corio RL. (1986), Sarcomas and sarcomatoid neoplasms of the major salivary gland regions. A clinicopathologic and immunohistochemical study of 67 cases and review of the literature. *Cancer*; 58:1305–1315.



This work is licensed under Creative Commons Attribution 4.0 License

To Submit Your Article Click Here:

Submit Manuscript

DOI: [10.31579/2640-1053/233](https://doi.org/10.31579/2640-1053/233)

Ready to submit your research? Choose Auctores and benefit from:

- fast, convenient online submission
- rigorous peer review by experienced research in your field
- rapid publication on acceptance
- authors retain copyrights
- unique DOI for all articles
- immediate, unrestricted online access

At Auctores, research is always in progress.

Learn more <https://www.auctoresonline.org/journals/cancer-research-and-cellular-therapeutics>