



Short communication

Pleomorphic adenoma of the lacrimal gland in a developing community

W.I.B. Onuigbo^{a,*}, N.O. Magulike^b

^aDepartment of Pathology, Medical Foundation and Clinic, Enugu, Nigeria.

^bDepartment of Ophthalmology, University of Nigeria Teaching Hospital, Enugu, Nigeria.

*Corresponding author; Department of Pathology, Medical Foundation and Clinic, Enugu, Nigeria.

ARTICLE INFO

ABSTRACT

Article history:

Received 24 October 2013

Accepted 05 November 2013

Available online 30 November 2013

Keywords:

Pleomorphic adenoma

Lacrimal gland

Operation

Nigerian igbos

This study presents cases of lacrimal gland pleomorphic adenoma (LGPA) diagnosed postoperatively in a developing community. Records kept at a Reference Pathology Laboratory serving the Igbo Ethnic Group in Nigeria were searched for positive cases of LGPA which occurred between 1976 and 1990. Seven cases submitted by individual ophthalmologists were not preoperatively diagnosed as pleomorphic adenoma but as tumour, haemangioma, cyst, fibroma, adenocarcinoma and squamous cell carcinoma. The ages ranged from 17 years to 55 years (mean 34 years). The male:female ratio was 3:4 and the right:left ratio came to 5:2. The symptoms were diplopia, proptosis, and swelling. The duration before presentation varied from 1 year to 15 years. Five lesions were in the orbital lobe and 2 in the palpebral lobe. The excised mass measured a maximum diameter of 2 to 4 cm (mean 3 cm). In this developing community, where LGPA was not preoperatively diagnosed, recourse to histopathology put this interesting entity on the epidemiology map of the world.

© 2013 Sjournals. All rights reserved.

1. Introduction

Pleomorphic adenoma (benign mixed tumour) of the lacrimal gland has become a tumour of subsuming interest. From the Wills Eye Hospital, Philadelphia, Pennsylvania, USA, Murphy and Rodrigues (Murphy, 1974)

presented 2 cases of LGPA of the palpebral portion of the lacrimal gland which had been diagnosed clinically as a sebaceous cyst and a haematoma. It was only histopathologic examination that established the diagnosis in both cases. Therefore, we present 7 cases of LGPA not recognized clinically in patients of the Igbo Ethnic group (Basden, 1966) in Nigeria, West Africa.

2. Materials and methods

Records kept by the senior author (WO) at a Regional Reference Pathology Laboratory serving the Igbos were retrospectively analyzed from 1976 to 1990 with regard to histological diagnosis of LGPA. Epidemiological data were also taken into account.

3. Results and discussion

Table 1 summarizes the findings.

Table 1

Epidemiology and presenting symptoms of Igbo patients with LGPA.

Serial No.	Lab No.	Name	Age (yr)	Sex	Side	Site	Size (cm)	Symptom	Duration (yr)	Clinical Diagnosis
1	B 595/76	OC	19	F	R	Orbit	3	Diplopia, proptosis	1	Tumour
2	3036/77	IA	50	F	R	Orbit	4	Proptosis	1	Haemangioma
3	3347/77	EE	17	F	R	Orbit	3	Proptosis	2	Tumour
4	H417/80	AA	21	M	R	Lid	2	Swelling	3	Cyst
5	F 90/91	NE	30	F	L	Orbit	3	Proptosis	2	Adenocarcinoma
6	970390	AC	55	M	L	Orbit	3	Proptosis	15	Squamous carcinoma
7	990980	ES	45	M	R	Lid	2	Swelling	10	Fibroma

Current teaching advises complete excision of LGPA without prior incisional biopsy (Lai et al., 2009; Auran , 1988; Rose and Wright, 1992). This trend was propitiously carried out in this developing community. Our records do not contain cases of relapse. Apparently, whenever this occurs, “exenteratio orbitae” has been recommended (Becelli, 2002).

In the review published in one Journal (Lai et al., 2009), it was mentioned that the Registry of Ophthalmic Pathology at the Armed Forces Institute of Pathology “received referral cases from various national and international institutions including Africa and India.” Actually, our catchment, which is largely but not entirely devoted to the Igbos, has ensured publications in the field of ophthalmology in respect of enucleation (Onuigbo, 1976) orbito-ocular tumours (Ezegwui et al., 2002), epidermoid cysts (Ezegwui and Onuigbo, 2001) pyogenic granulomas (Onuigbo and Magulike, 2003) intraepithelial neoplasms (Ezegwui and Onuigbo , 2004) and eyelid squamous cell carcinomas in blacks and albinos (Onuigbo, 2005).

LGPA is at times subjected to the strict lobar divisions of palpebral and orbital entities, the ratio being 8:55, i.e., 1:7 (Rose and Wright, 1992). In the present work, the ratio was 2:5 i.e., approximately 1:3. However, the present data are not large enough for effective comparison.

Patients often give a short history but many years may pass (Rose and Wright, 1992). In our environment, this was the pattern.

4. Conclusion

On the basis of the review of our local data on LGPA, the Igbos of Nigeria present relatively early for the treatment of this condition. Although the practitioners might not have pre-operatively diagnosed it, by providing clinical details and submitting specimens for histopathology, they helped to put this entity on the epidemiology map of the world.

Our thanks are due not only to the ophthalmic surgeons who took the trouble to submit written-up, invaluable, operation specimens but also to the technical staff who processed them efficiently.

References

- Auran, J., Jakoiec, F.A., Krebs, W., 1988. Benign mixed tumor of the palpebral lobe of the lacrimal gland. Clinical diagnosis and appropriate surgical management. *Ophthalmol.*, 95, 90–99.
- Basden, G.T., 1966. *Niger Ibos*. Cass: London.
- Becelli, R., Carboni, A., Cassoni, A., Renzi, G., Lannetti, G., 2002., Pleomorphic adenoma of the lachrymal gland: presentation of a clinical case of relapse. *J. Craniofacial. Surg.*, 13, 49–52.
- Ezegwui, I.R., Ezepue, U.F., Umeh, R.E., Onuigbo, W.I.B., 2002. Enucleation of the eyes in children in Nigeria. *Nig. J. Ophthalmol.*, 1, 21–23.
- Ezegwui, I.R., Onuigbo, W.I.B., 2001. Ophthalmic presentation of epidermoid cysts in an African community. *Intl. Ophthalmol.*, 24, 279–281.
- Ezegwui, I.R., Onuigbo, W.I.B., 2004. Intraepithelial neoplasia of the conjunctiva in a developing community. *Intl. J. Ophthalmol.*, 4, 982–984.
- Lai, T., Prabhakaran, V.C., Malthotra, R., Selva, D., 2009. Pleomorphic adenoma of the lacrimal gland: is there a role for biopsy. *Eye.*, 23, 2–6.
- Murphy, M.B., 1974. Rodrigues MM. Benign mixed tumor of the (palpebral) lacrimal gland presenting as a nodular eyelid lesion. *Am. J. Ophthalmol.*, 77,108–111.
- Onuigbo, W.I.B., 1976. Enucleations in Nigerian Igbo children. *J. Pediatric. Ophthalmol.*, 13, 165–167.
- Onuigbo, W.I.B., 2005. Comparative study of squamous cell carcinoma of the eyelids in blacks and albinos. *Intl. J. Ophthalmol.*, 5, 836–837.
- Onuigbo, W.I.B., Magulike, N.O., 2003. Conjunctival pyogenic granulomas. *J. Coll. Med.*, 8, 40–41.
- Rose, G.E., Wright, J.E., 1992. Pleomorphic adenoma of the lacrimal gland. *Br. J. Ophthalmol.*, 76, 395–400.