A case of parotid Acinic Cell Carcinoma in a young boy

Chiara Bianchini¹, Andrea Ciorba², Francesco Stomeo³, Stefano Pelucchi⁴, Massimo Pedriali¹, Antonio Pastore⁵

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INTRODUCTION

Epithelial salivary gland neoplasms are rare in children and adolescents: they represent only the 1%-5% of the total number of salivary gland tumours ¹. In the infancy, it has been reported that 35% of salivary gland tumours are malignant and between these mucoepidermoid carcinoma is the most frequent, while the occurrence of acinic cell carcinoma in children is very rare ¹. The Authors are presenting a case of an acinic cell carcinoma of the parotid gland in a 15-year-old boy.

CASE REPORT

A 15-year-old boy was referred to the ENT Department at the University Hospital of Ferrara, for the assessment of a right, painless, firm, pectorcular mass, which was noticed six months before. The ecographic evaluation revealed the presence of an irregular surfaced, 2.5 cm maximum diameter, right parotid mass and a 1 cm reactive lymphoadenopathy located at the inferior parotid edge. A fine needle aspiration cytology (FNAC) was performed and revealed a possible epithelial salivary gland tumour containing acinic cells. Even if facial nerve function appeared normal, facial electromyography (EMG) was performed prior to surgery, and it proved a little action potential amplitude asymmetry in the inferior right area of the face.

A total parotidectomy with preservation of the facial nerve was performed, under general anesthesia. The mass was hard, poorly circumcised, not encapsulated and situated both in the superficial and deep portion of the gland with intimal involvement of the superior branches of the right facial nerve. Histologic examination revealed an infiltrating Acinic Cells Carcinoma with no metastasis in the six lymphnodes found inside the specimen (Fig. 1).

Only a mild weakness of right eye’s orbicular muscle was noted in the first two postoperative days. The patient underwent a single cycle of radiotherapy ($400 cgy total dose). After 5 years of follow up, the patient is still disease free.

DISCUSSION

Malignant epithelial salivary gland neoplasms are infrequent in adults and rare in children, as there only are few reports in the literature. Published data suggest a male preponderance; it present ⁴, ⁵. Nevertheless, in the pediatric population, patient tolerance of this procedure can limit its use ⁴. Differential diagnosis includes neoplastic lesions, vascular malformations, acute and chronic cervical lymphadenopathies and cystic lesions ⁴, ⁵. Patient history, physical examination, radiological studies, all are necessary for treatment planning. Surgery is the treatment of choice for epithelial salivary gland tumours in both adults and children.

Children adjuvant radiotherapy should be considered only in selected cases for its possible complications; these include trismus, retarded growth of the facial bones, hemi-facial hypoplasia, pitting insufficiency and X-ray induced cancer ⁴, ⁵. Mainly indications for radiation therapy after surgery are residual disease, histologically high grade lesions, soft-tissue invasion, cervical lymph node metastasis, perineural facial nerve and vascular extension ⁴, ⁵. Our case was treated due to the perineural involvement, as clinically evident at the EMG. Our patient has shown no evidence of recurrence after 5 years of clinical and radiological follow-up.

FINAL REMARKS

Malignant epithelial salivary gland neoplasms are infrequent in adults and very rare in children. We support the idea that the best treatment for parotid malignancies in children as in adult age is surgery and only in selected cases adjuvant radiation therapy is necessary.

REFERENCES


¹ PhD (Clinical Assistant) ² MD (ENT Department, University Hospital of Ferrara) ³ MD (ENT Department, University Hospital of Ferrara) ⁴ MD (ENT Department, University Hospital of Ferrara) ⁵ MD (Anatomic Pathology Section, University Hospital of Ferrara)