Remote Recurrence/Metastasis of Acinic Cell Carcinoma:

a Case Series and Literature Review

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Background:

Acinic cell carcinoma (ACC) is a relatively indolent salivary gland tumor with recurrence usually occurring within the first five years after the primary resection. Delayed recurrence/metastasis after more than 10 years is rare and often poses diagnostic and treatment challenges.

Methods:

The study was approved by Indiana University Institutional Review Board. Six patients with remote recurrence/metastasis were identified from 1/2000 to 5/2024. Clinicoradiologic presentation, pathologic findings, treatment, and follow-up were reviewed. Case reports in literature since 1960 were also summarized.

Results

The six patients comprised five females and one male (age range: 22 to 47 years). All tumors arose from the parotid gland. The interval between primary resection to recurrence ranged from 10 to 45 years. The most common recurrent/metastatic locations were scalp, lung, bone, and ear canal. High grade transformation was identified in one case. Two of six patients died of the disease including the case with high grade transformation, three patients were still alive, and one died from unrelated condition.

Another six cases identified from the literature also involved the parotid gland, including five females and one male (age range: 15 to 60 years). The interval ranged from 11 to 30 years. Bone, lung and cutaneous sites were involved. Four of six patients were still alive, and the follow-up was not available in two patients.

Conclusions:

Remote recurrence/metastasis of ACC after 10 years of primary resection is very rare. This phenomenon predominantly affects females. Local recurrence usually involves structures near tumor beds. Distant metastasis affects scalp, lung, bone, or skin. Diagnosis can be challenging if patients and/or physicians are unaware of the original diagnosis.

Scientific/Clinical/Policy Impact and Implications:

The study raises awareness of an unusual clinical and pathological characteristic of ACC. A comprehensive review of medical history is crucial for an accurate diagnosis and appropriate clinical management.