Acantholytic Squamous Cell Carcinoma of Uncommon Sites

Elif Eda Ozer* and Gulsen Pinar Soydemir

Bakırköy Dr Sadi Konuk Research and Education Hospital, Department of Radiation Oncology, Turkey

Abstract

Laryngeal cancers constitute 2-5% of all cancers, and 45% of all head and neck cancers. Acantholytic squamous cell carcinoma (ASCC), also known as adenoid squamous cell carcinoma, is a rarely observed histological subtype of squamous cell carcinoma (SCC). While they are rarely seen in the digestive and respiratory tracts, their course tends to be more aggressive. Furthermore, while head and neck squamous cell carcinoma tend to have a low rate of distant metastasis, the lungs are still the most common target organs involved by metastasis. Metastasis from the laryngeal region to soft tissues, skin, and adrenal areas is rarely encountered.

Keywords: Acantholytic squamous cell cancer; Soft tissue metastasis

Introduction

Squamous cell cancers are the most commonly observed histopathological type of laryngeal cancer. Squamous cell cancers have verrucous, basoloid, papillary, fusiform cell, acantholytic and adenosquamous subtypes. Acantholytic squamous cell carcinoma (ASCC), also known as adenoid squamous cell carcinoma, is a rarely observed histological subtype of squamous cell carcinoma (SCC). Acantholysis develops as a result of the loss of desmosomal adhesion proteins. The loss of the cell-to-cell adhesion leads to morphological changes that mimic other cell types. It is for this reason that acantholytic SCC is mentioned in the literature with numerous different names (adenoid SCC, pseudovascular adenoid SCC, pseudoangiosarcomatous SCC, pseudoglandular SCC) [1]. O'Shea et al. [2] have demonstrated that 89% of acantholytic SCCs are associated with the loss of at least one desmosomal cell adhesion protein, while 65% are associated with the loss of two or more desmosomal protein. Desmoglein 1/2 and desmoplakin are the proteins with the highest rate of loss. Acantholytic SCC is generally reported on the skin and lips that are exposed to the sun, although cases with acantholytic SCC identified in their gingiva, tongue, buccal mucosa, breasts, cecum, vulva and penis have also been reported. Although no clear estimation has been made about its prognosis due to the low number of patients, the ASCC subtype is known to have a more aggressive course [3-6]. The risk of distant metastasis in head and neck cancer patients varies between 4% and 25% [7]. The most common sites for hematogenous metastases to occur are the lungs (60%) and bone (20%) [8]. Lymphatic metastases, on the other hand, are observed most commonly in the mediastinal and axillary areas [9]. Metastasis from the larynx to the soft tissue and skin are seen very rarely.

Discussion

Laryngeal cancers constitute 2-5% of all cancers, and 45% of all head and neck cancers. Squamous cell carcinoma originating from the epithelium is the most common type of laryngeal cancers. There are six histologically defined subtypes of squamous cell carcinoma, which are the verrucous, basoloid, papillary, fusiform cell, acantholytic and adenosquamous subtypes. Acantholytic squamous cell carcinoma was first described by Lever in 1947 [10]. Lever initially assumed that, due to its glandular structure and epithelial proliferation, this subtype originated from the sweat glands, and hence defined these tumors as adenoacanthoma that stem from the exocrine sweat glands. Later studies showed that this subtype is actually an SCC variant of non-exocrine origin [11]. Although acantholytic squamous cell carcinoma localized to the head and neck are usually observed on the skin and lips exposed to the sun, they are also observed in the oral cavity, nasopharynx, tongue and larynx in rare cases [11-17]. The best prognosis with ASCCs has been reported by Jones et al. as being the tumors localized...
Acantholytic squamous cell carcinoma is a rare variant of squamous cell carcinoma. It can especially occur on the skin and can even metastasize to atypical body sites. It must be kept in mind that metastases can be detected in early periods in such cases and that the disease can even metastasize to a typical body site.

Acknowledgment
None.

Conflict of Interest
No conflict of interest.

References


