

# METASTASIZING SQUAMOUS CELL CARCINOMA OF THE SKIN

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## ABSTRACT

Metastases from carcinomas of the skin are rare.

During 1994-1996 six patients, 4 males and 2 females, aged from 52 to 94 years, were treated at the Department of Dermato-Venereology of the Semmelweis University of Medicine for metastasizing squamous cell carcinoma of the skin. After being operated for the primary tumors they developed metastases within 13 months. Presenting these cases, the authors discuss the main risk factors for metastasizing squamous cell carcinoma of the skin: the anatomical localization, thickness of the tumor, invasion of the subcutis, and the grade of dedifferentiation.

## KEY WORDS

*carcinoma, squamous cell, skin, metastases*

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## INTRODUCTION

The incidence of cutaneous squamous cell carcinoma has increased. The most common localization of the primary cutaneous squamous cell carcinoma is the skin of the hands, arms, face, and neck. The majority of these tumors are easily cured by surgical treatment. The incidence of metastases is between 2% and 5%, usually in patients with primary tumor of the hands and face (1,2). The metastases develop consistently in the regional lymph nodes in 85% of the cases. Very rarely other organs can be seeded as well: lungs, liver, bones and the central nervous system.

## PATIENTS AND METHODS

From 1994 to 1996 we treated 6 patients (4 men, 2 women) with metastasizing squamous cell carcinoma. They were between 52 and 94 years old, mean 71,5 years. In one case the metastasis and the primary tumor were diagnosed at the same time. The longest symptomless period lasted 13 months, the mean time until appearance of the metastases was 7 months. The data of the patients and the main histological features of their primary tumors are summarized in Table No.1. The tumors were classified according to the Broders grading (3). The metastases



Fig.1. Large exulcerated lesion on the left hand caused by primary squamous cell carcinoma.



Fig.2. Enlarged axillar lymph node due to metastases

are described in Table No.2, as well as their treatment and their actual status.



Fig.3. Exulcerated retroauricular metastatic lymph node.

## RESULTS

During the 1994-1996 period 229 patients were treated for squamous cell carcinoma at the Department of Dermato-Venereology, Semmelweis University of Medicine. Metastases were found in 6 cases, 2.6% of the total number of patients.

These six cases of metastasizing squamous cell carcinoma have been presented in this study. In five cases, the primary tumors were localized in areas where malignant tumors are more prone to metastasize, namely the hands and the face. One tumor developed on the basis of a chronic venous leg ulcer. Except for this case, the primary lesions were treated surgically.

In all instances the metastases appeared within 13 months after the diagnosis of the primary lesion. In one case, the primary tumor and the regional lymph node metastasis were diagnosed at the same time. The metastases developed in the regional lymph nodes in 5 cases, in one case in the lungs. The thickness of the primary tumors was more than 2 mm in all cases. 4 tumors had invaded the subcutis, and all were classified histologically as non-differentiated (according to Broders grades III-IV.). The regional lymph node metastases of 2 patients were excised, in 4 patients they were irradiated (Telecobalt, 30 Grays), and in 2 cases systemic chemotherapy was initiated. Of these 6 patients, 3 had died within 2 years.

## DISCUSSION

Several studies dealing with metastasizing squamous cell carcinoma have been published. In Southern Australia Czarneczki et al found that at least 2% of

Table 1. Metastases from squamous cell carcinomas of the skin: patients' sex and age, tumor localization and characteristics.

patient	sex	age	localization	tumor thickness	subcutis infiltration	grade (Broders)
N.P.	male	64 years	left hand, 4 <sup>th</sup> finger	9.6 mm	yes	III.
M.P.	male	69 years	left face	2.4 mm	yes	IV.
K.I.	male	52 years	right hand 2nd. finger	3.5 mm	no	III.
K.N.	female	94 years	left side preauricular	6.4 mm	yes	IV.
Sz.S.	female	72 years	right leg ulcer	>2 mm	-	III-IV.
F.J.	male	78 years	scalp	>2 mm	yes	IV.

patients with squamous cell carcinoma of the skin would develop metastases within 3 years (4). In the United States Epstein et al. mentioned the same incidence (5).

The most important risk factors for metastases are tumor localizations in the areas predisposed to metastasize, and the histological characteristics of

the tumor: the thickness, the degree of invasion of the subcutis, and the grade of differentiation (6,7). Dedifferentiated tumors (Broders grades III-IV.), thickness greater than 2 millimeters and invasion of the subcutis are indications of an increased risk for metastases (8,9).

We reported six patients with metastasizing squamous

Table 2. Metastases from squamous cell carcinomas of the skin: interval between detection of primary tumor and appearance of metastases, treatment and outcome.

patient	localization of the metastases	appearance after primary tumor	treatment	actual status
N.P.	lungs	1 month	Vincristin, Adriamycin	death
M.P.	lymph nodes submandibular	13 months	blockdissection irradiation	dissemination
K.I.	lymph nodes axillar, neck	12 months	blockdissection irradiation, Bleomycin	death
K.N.	lymph nodes preauricular	4 months	irradiation	dissemination
Sz.S.	lymph nodes inguinal	at the same time	-	death
F.J.	lymph nodes retroauricular	12 months	irradiation	dissemination

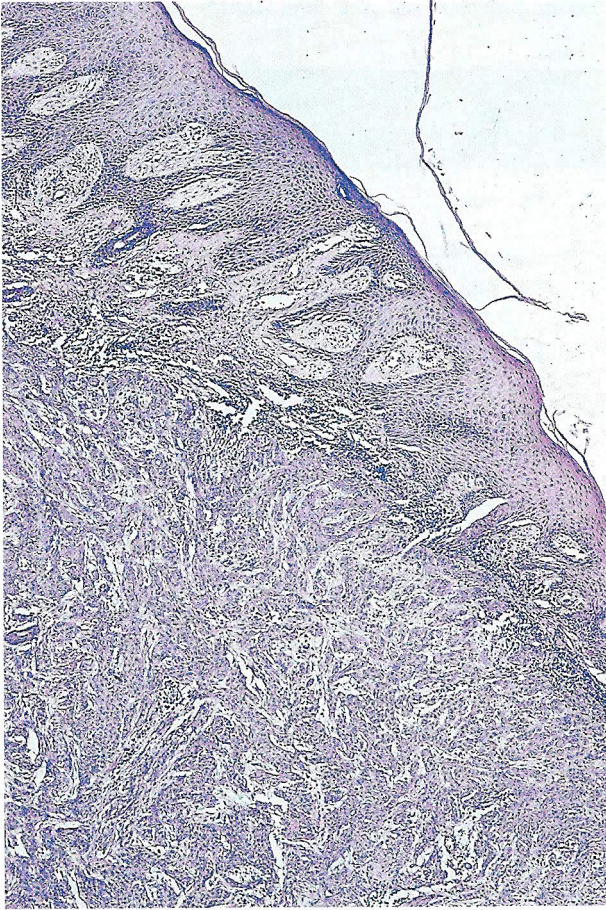


Fig.4. Multiple irregular strands of tumor cells

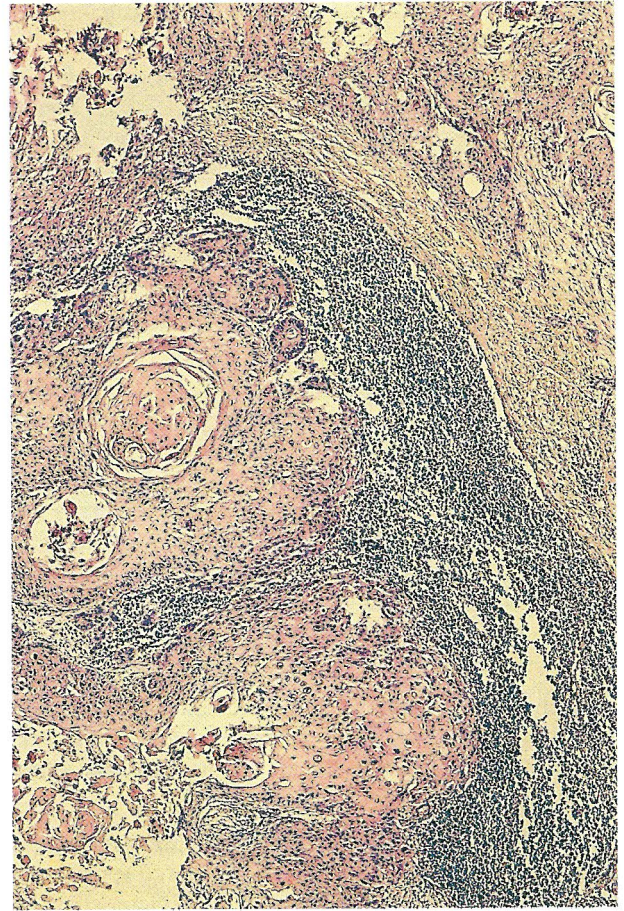


Fig.5. Invasion of tumor into a lymph node.

cell carcinoma. All of them belonged to the high-risk-group for developing metastasis.

Although most patients with squamous cell carcinoma are easily cured by surgical treatment, the

possibility of metastasizing must always be taken into consideration, the rate of occurrence being 2-5%. Taking the clinical and histological risk factors into account, the long-term follow-up of the patients is essential

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