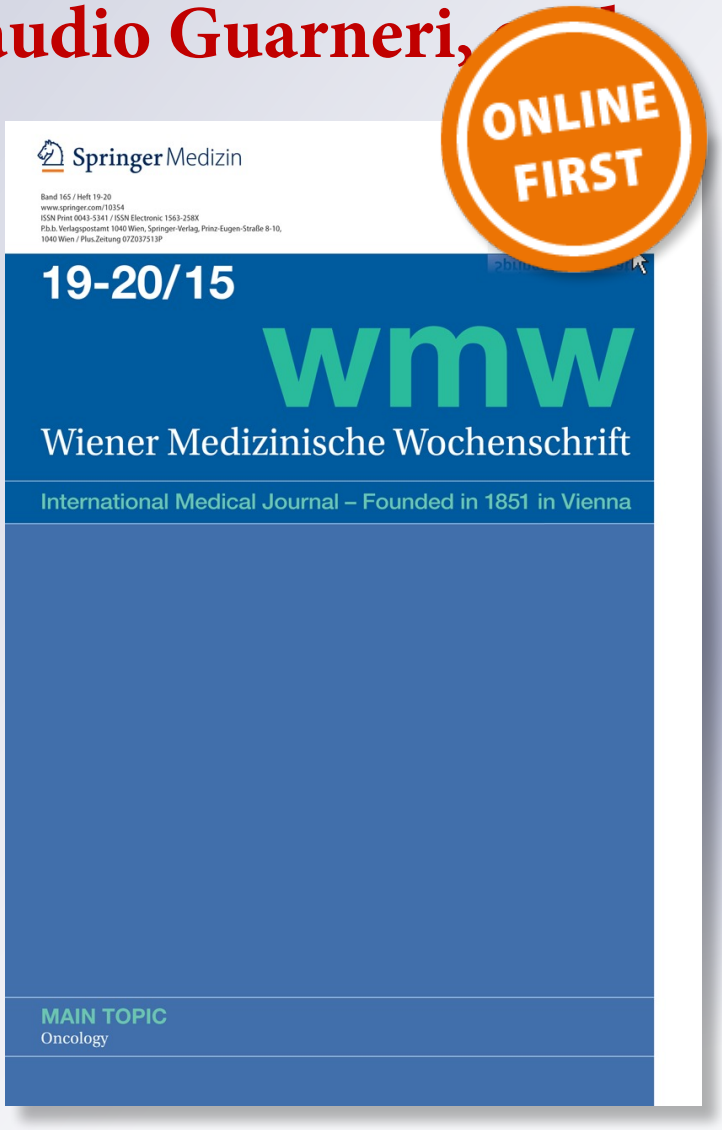
The "different face" of esophageal cancer: cutaneous manifestation of visceral malignancies

Julian Ananiev, Anastasiya Atanasova Chokoeva, Teodor Stamatov, Georgi Konstantinov Maximov, Ilko Bakardzhiev, Claudio Guarneri,

Wiener Medizinische Wochenschrift

ISSN 0043-5341

Wien Med Wochenschr
DOI 10.1007/s10354-015-0398-x



Springer

case report

Wien Med Wochenschr
DOI 10.1007/s10354-015-0398-x

wmw
Wiener Medizinische Wochenschrift

The "different face" of esophageal cancer: cutaneous manifestation of visceral malignancies

Julian Ananiev · Anastasiya Atanasova Chokoeva · Teodor Stamatov · Georgi Konstantinov Maximov · Ilko Bakardzhiev · Claudio Guarneri · Claudio Tana · Uwe Wollina · Torello Lotti · Georgi Tchernev

Received: 7 October 2015 / Accepted: 19 October 2015

Summary Squamous cell carcinoma is the most common type of neoplasm of the esophagus with global incidence. Its early symptoms are often nonspecific as the disease could be detected only when metastases in various organs are already presented. Esophageal metastases present an extremely small part from all cutaneous metastases as the real incidence of cutaneous metastases due to cancer of the esophagus account for 0.5–9 % and only a small part of them are reported and rarely involve the facial region. Despite this, cutaneous metastases may be the first sign of malignancy of the esophagus, which immediately determined the worst prognosis and fatal outcome in these patients. Average survival prognosis at the time of diagnosis of esophageal carcinoma in stage

Assoc. Prof. G. Tchernev (✉)
Policlinic for Dermatology and Venereology, Medical Faculty,
Saint Kliment Ohridski University, University Hospital Lozenetz,
Koziak str. 1,
1407 Sofia, Bulgaria
e-mail: georgi_tchernev@yahoo.de

Assoc. Prof. J. Ananiev, MD, PhD
Department of General and Clinical Pathology, Forensic Medicine and Deontology, Trakia University,
Armeiska str.11,
Stara Zagora, Bulgaria
e-mail: julian.r.ananiev@gmail.com

Dr. A. A. Chokoeva
"Onkoderma"-Policlinic for Dermatology and Dermatologic Surgery,
General Skobelev 26 blvd,
Sofia, Bulgaria
e-mail: assia_chokoeva@abv.bg

T. Stamatov, MD
Department of General and Clinical Pathology,
Forensic Medicine and Deontology,
Trakia University, University Hospital "Prof. Dr. Stoyan Kirkovich",
Armeiska str.11,
Stara Zagora, Bulgaria
e-mail: aizec@abv.bg

Dr. G. K. Maximov
Department "Medicines Use Control", Bulgarian Drug Agency,
8 Damian Gruev str.,
1303 Sofia, Bulgaria
e-mail: gkmaximov@gmail.com

Assoc. Prof I. Bakardzhiev
Medical College, Medical University of Varna,
84 Tzar Osvoboditel str,
9000 Varna, Bulgaria
e-mail: varna2008@gmail.com

C. Guarneri, MD
Department of Clinical Experimental Medicine, Unit of Dermatology, University of Messina (Italy) C/O A.O.U. "G. Martino",
via Consolare Valeria,1 – 98125,
Messina, Italy
e-mail: cguarneri@unime.it

C. Tana
Internal Medicine Unit, Guastalla Hospital,
Ausl Reggio Emilia,
Reggio Emilia, Italy
e-mail: claudio.tana@yahoo.it

Prof. Dr. U. Wollina
Department of Dermatology and Allergology,
Academic Teaching Hospital Dresden-Friedrichstadt,
Friedrichstrasse 41,
01067 Dresden, Germany
e-mail: wollina-uw@khdf.de

Prof. Dr. T. Lotti, MD, MD (Hon)
University of Rome "G. Marconi",
Rome, Italy
e-mail: professor@torellolotti.it

Published online: 09 November 2015

IV is 4–6 months, while the survival-associated expectations in cases of associated skin lesions manifestation is 4 months. We present a rare case of esophagus carcinoma in advanced stage, presented with severe cutaneous metastasis in the face region, accompanied by heavy blood coughing and hematemesis, which led to fatal outcome in the reported patient. The incidence of cutaneous metastases due to this visceral malignancy is discussed, as we highlight the frequency of metastases as a first clinical sign in esophageal cancer. The mortality rate is high due to the advanced stage of progression of the disease or presented metastases spread at the time of diagnosis, while treatment-related mortality accounts 10.3 %.

Keywords Esophagus · Cancer · Metastasis · Bleeding · Death

Die unterschiedlichen Gesichter des Ösophaguskarzinoms: kutane Manifestationen viszeraler Neoplasien

Zusammenfassung Das Plattenepithelkarzinom (SCC) ist der häufigste Typ maligner Ösophagustumoren mit weltweitem Vorkommen. Seine Frühsymptome sind häufig unspezifisch, und die Diagnose wird dann erst infolge Organmetastasierung gestellt. Kutane Metastasen des Ösophaguskarzinoms sind extrem selten und stellen nur 0,5–9 % aller Metastasen dieses Tumortyps dar, wobei das Gesicht sehr selten betroffen ist. Dennoch können Hautmetastasen das erste klinische Anzeichen einer Ösophagusneoplasie sein, was dann aber auf eine schlechte Prognose und einen fatalen Ausgang hindeutet. Im Stadium IV ist die Lebenserwartung auf 4–6 Monate beschränkt, ebenso wie bei Patienten mit einer Hautmetastasierung. Wir berichten über einen seltenen Fall eines fortgeschrittenen Ösophaguskarzinoms mit ausgedehnter fazialer Metastasierung, Hämatemesis und Hämoptysis, welches zum Tode führte. Die Inzidenz kutaner Metastasen bei viszeralen Neoplasien wird besprochen, und wir verweisen auf die Rolle kutaner Absiedlungen als Erstsymptom beim Ösophaguskarzinom hin. Die Mortalität ist hoch infolge der fortgeschrittenen Erkrankung, die therapiebedingte Mortalität beträgt 10,3 %.

Schlüsselwörter Ösophagus · Krebs · Metastasen · Blutung · Tod

Introduction

Although squamous cell carcinoma is the most common type of neoplasm of the esophagus with global incidence, its early symptoms are often nonspecific as the disease could be detected only when metastases to various organs are already presented [1]. Achalasia, Plummer–Vinson syndrome, coeliac disease, and nutritional factors are considered as the major risk factors for its occurrence [2]. The mortality rate is high due to an advanced stage of progression of the disease or already presented metastases spread at the time of diagnosis, while treatment-related mortality accounts for 10.3 % [2, 3].

Case report

We present the case of a 73-year-old male patient admitted to the emergency department in severe general condition with a history of heavy blood coughing and hematemesis. The patient had been diagnosed with esophageal carcinoma—IV clinical stage. Despite all actions for controlling the hypovolemic shock, about an hour later, the patient died. After total cardiopulmonary resuscitation patient ends with exitus letalis. An autopsy was performed with subsequent histological examinations.

Severe paleness of the whole skin was clinically observed in correspondence with the lowest laboratory parameters in terms of hemoglobin, hematocrit, and red

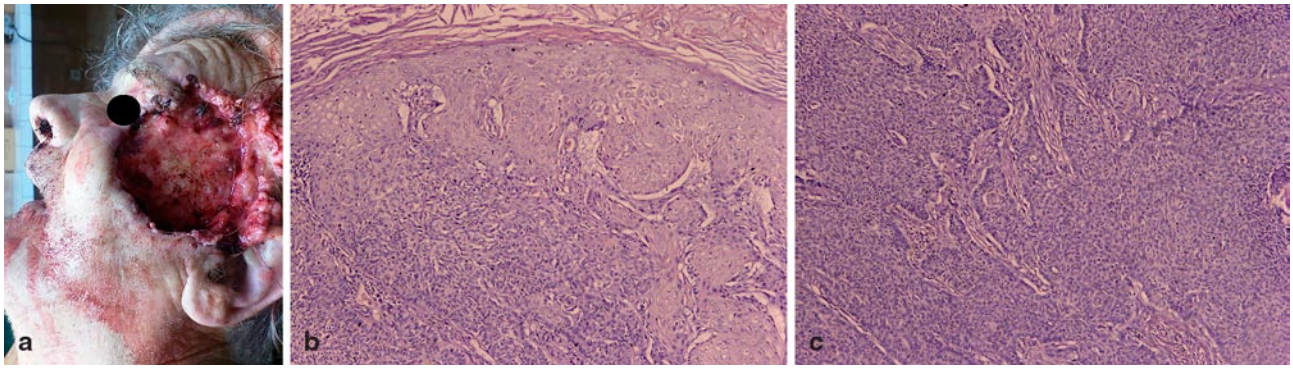


Fig. 1 **a** Macroscopic view of the lesion of the face—an extensive necrotic area with ulcerating bottom and uneven edges. **b** Histopathological picture of the ulcerated lesion has shown moderately differentiated squamous cell carcinoma; drag nests of tumor cells with hyperchromatic nuclei; hyperkeratosis; and necrotic fields (×100). **c** Histological view of a lesion in the esophagus—moderately differentiated squamous cell carcinoma; among nests and strands of tumor tissue, single magic the identified formation of keratin pearls (×100)

blood cell count. A large necrotic area with a diameter of 10 cm, rough edges, parched secretions, and ulcerating bottom—reaching in some areas the underlying bones—was observed in the left facial area, involving the medial temporal area, the area above the zygomatic bone, and the medial part of the external auditory canal (Fig. 1). The tracheobronchial tree was filled with blood and about 1500 ml of blood and blood clots were found in the stomach.

A tumor formation with polypoid-infiltrative form was established within the dissection of the esophagus, about 25 cm from the dentition, on the border of middle—lower third, covering the entire circumference, stenosing unevenly the lumen, which was prosthesis with self-expanding metal stents (SEMS). The tumor also involved the right main bronchus as well as the vascular plexus around him. Another well-demarcated, rounded tumor formation was found in the lower lobe of the left lung measuring approximately 4 cm × 5 cm. The macroscopic examination of other organs did not establish any additional pathological changes directly related with the death of the patient.

The histological examination of the esophageal tumor formation established nests and strands of moderately differentiated squamous cell carcinoma, composed of a plurality of cells with basophilic cytoplasm and large, hyperchromatic polygonal nuclei, some of them showing irregularly mitoses. Focal areas with marked formation of keratin pearls were obtained among the nests and the drag from tumor tissue. The histological findings after examination of the tissue from the facial lesion was identical with the findings of the esophageal tumor, as contemplates alternating sections with hyperkeratosis and desquamation, as well as necrotic fields was found in addition.

Discussion

Esophageal metastases present an extremely small part of all cutaneous metastases, as a major part of them is a result of esophageal adenocarcinoma [4]. The real incidence of cutaneous metastases due to cancer of the esophagus accounts for 0.5–9 %, as only a small part of them are reported and rarely involve the facial region [1]. Despite this, cutaneous metastases may be the first sign of malignancy of the esophagus, which immediately determined the worst prognosis and fatal outcome in these patients [2]. Average survival prognosis at the time of diagnosis of esophageal carcinoma in stage IV is 4–6 months, while the survival-associated expectations in cases of associated skin lesions manifestation is 4 months [4].

Despite the various subtypes of squamous cell carcinoma of the esophagus, the neoplasms with moderate-to-low differentiation, as well as some more specific types as basal-squamous cell carcinoma, the sarcomatous variant of squamous cell carcinoma, etc. are usually associated with even poorer prognosis [5].

Treatment at these stages remains difficult and rarely curable [1]. A higher preoperative absolute peripheral monocyte count is recently reported as a possible useful prognostic marker in patients who underwent esophagectomy [6]. However, a focus on palliation with consideration of esophageal stenting or gastrostomy tube placement, palliative chemotherapy, and radiation are choices of consideration in advanced stages [4].

Conflict of interest

All authors declare that there are no actual or potential conflicts of interest in relation to this article.

References

1. Triantafyllou S, Georgia D, Gavriella-Zoi V, Dimitrios M, Stulianos K, Theodoros L, Georgios Z, Dimitrios T. Cutaneous metastases from esophageal adenocarcinoma. Int Surg. 2015;100(3):558–61.
2. Messmann H. Squamous cell cancer of the oesophagus. Best Pract Res Clin Gastroenterol. 2001;15(2):249–65. (Review).
3. Kumagai K, Mariosa D, Tsai JA, Nilsson M, Ye W, Lundell L, Rouvelas I. Systematic review and meta-analysis on the significance of salvage esophagectomy for persistent or recurrent esophageal squamous cell carcinoma after definitive chemoradiotherapy. Dis Esophagus. 2015. doi:10.1111/dote.12399.
4. Levin J, Ogden L, Karnath B. Multiple cutaneous nodules presenting as metastatic squamous cell carcinoma of the esophagus. Dermatol Online J. 2013;19(5):18173.
5. Ledderose GJ, Englhard AS. Isolated nasal tip metastasis from esophageal squamous cell carcinoma: case report and literature review. Case Rep Otolaryngol. 2015;2015:246094.
6. Han L, Jia Y, Song Q, Wang N, Wang J, Bai B, Chen X, Wang C, Cheng Y. Prognostic significance of preoperative absolute peripheral monocyte count in esophageal squamous cell carcinoma. Dis Esophagus. 2015. doi:10.1111/dote.12401.