# Carcinosarcoma of the nose and paranasal sinuses – a case report

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#### INTRODUCTION

Tumors of mixed epithelial and mesenchimal origin and given a variety of names: carcinosarcoma, pseudosarcoma and others, are rare and occur mainly in the urinary bladder (Holtz, 1972) and breast (Harris et al., 1974). From the few reports it is impossible to draw any conclusions about the biologic behavior of this tumor.

Reviewing the literature, it seems that there is a constant contraversy concerning the cellular composition of the tumor. Are we dealing with a true heterologous tumor (malignant changes of both the epithelial and mesenchimal origin), or is the tumor epithelial and the mesenchimal changes secondary stromal reaction? (Holtz et al., 1972).

We present a patient suffering from carcinosarcoma of the nasal cavity and paranasal sinuses, a rare tumor especially in the nose and paranasal sinuses. Reports of the behavior of this tumor will give us a better chance of learning the biological behavior, prognosis, and maybe treatment of patients suffering from this disease.

## CASE REPORT

A 71 year old women was admitted to our department with the complaints of recurrent episodes of nose bleed, and difficulty of air entry through the nose, of 2 months duration. On examination the main pathological findings were a big polypoid mass in her right nostril and exophtalmus of the right eyeball. CT scan and tomography studies (Fig. 1) revealed a big mass filling the right maxillary and etmoidal sinuses, with bony destruction of the floor of the right orbit and penetration of the mass to the right orbital space. Biopsies from the nasal and sinusoidal masses revealed carcinosarcoma (Fig. 2). The patient was given cobalt radiation as therapy. 5 weeks later she underwent right radical maxillectomy with exanteration of the right eye. The immediate postoperative course was uneventful and the patient was dismissed after a short convalescence period. A few weeks later she returned complaining of headaches, weakness of the left side of the body and low grade fever. Examination aroused the suspicion and CT scan confirmed an intracerebral abscess of the right frontal lobe. Under treatment of antibiotics and re-



Figure 1. A section of tomography of the maxillary sinus demonstrating tumorous infiltration.

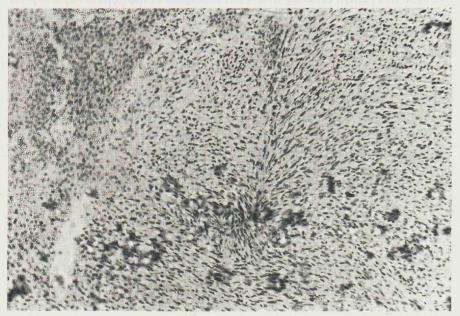


Figure 2. Histological picture of the tumor ( $\times 10$ ).

peated drainage procedures her condition deteriorated continually and 3 weeks later she passed away.

#### DISCUSSION

In 1957 Lane described 10 cases of carcinoma of the larynx with sarcomatous changes of the stroma. He noticed no intermingling of the two elements. Lane thought that the changes in the stroma were reactive and not real malignant changes, and called the lesion: "Pseudosarcoma".

During the years a few pseudosarcomas of the aerogastric system were described, always referring to tumors of both epithelial and mesenchimal malignant changes (Osamura et al., 1978; Srinivasan et al., 1979; Friedel et al., 1976).

There are no celar pathological definitions for either pseudosarcoma or carcinosarcoma. No definite line differentiates between the two. Reviewing the literature, it seems that the term carcinosarcoma was reserved for those tumors where intermingling of the carcinomatous and sarcomatous elements was noticed. The few cases where metastases of sarcomatous origin were noted were entitled carcinosarcoma. Batsakis (1981) in reviewing the literature concerning pseudosarcoma and other similar histological tumors found it reasonable to look at all tumors presenting malignant changes of the epithelial as well as mesenchimal origin and bearing a wide variety of names; pseudosarcoma, pleomorphic carcinoma, spindle cell squamous cell carcinoma, carcinosarcoma and others, as a single pathological entity which he divided into 3 main subgroups: 1. Uniphasic epithelial malignancy with benign typical stromal changes. ;. Biphasic epithelial malignancy, spindle cell type. 3. Carcinosarcoma - true heterologous malignancy. Tumors of mixed mesenchimal and epithelial origin are very rare as is evident from the very infrequent reports of these tumors. Few reports of their occurence in the mucous membranes of the aerogastric system are known (Osamura et al., 1978; Srinivasin et al., 1978; Friedel et al., 1976) and even fewer were reported to occur in the nose and paranasal sinuses (Howell et al., 1978; Jackson et al., 1977).

In a survery by Lewis et al. in 1972 on 772 patients suffering from tumors of the nose and paranasal sinuses, not even one case of carcinosarcoma was noted. In 1972 in a similar survery on 155 patients suffering from the above mentioned tumor Jackson et al. found 1% of the tumors to be carcinosarcomas (1 case). In additional similar surveys (Lederman, 1970; Harrison, 1971; Sisson et al., 1963), there were no reports or tumors of mixed epithelial and mesenchimal origin occurring in the nose and paranasal sinuses.

In 1977 Howell reported of 18 patients suffering from carcinoma of the nose and paranasal sinuses, showing a marked element of spindle cells, which he speculated as being metaplastic changes of epithelium.

We present a patient with clear malignant changes of epithelial as well as mesen-

chimal origin, it is reasonable to assume a true heterologous malignancy in this case, and the title: carcinosarcoma seems in place.

No conclusions can be drawn from this case on the biological behavior of this tumor. We believe that description of these rare tumors is necessary in order to understand the biological behavior of the various types of this tumor.

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# ANNOUNCEMENTS

#### **American Rhinologic Society**

# ANNOUNCING THE 5th DR. MAURICE H. COTTLE HONOR AWARD

The American Rhinologic Society announces the Fifth Dr. Maurice H. Cottle Honor Award for original clinical and laboratory research in Rhinology to be presented at the Dr. Maurice Cottle Celebration, June 1984. This prize is not limited to one recipient but will be given to an individual or group of persons for meritorious accomplishment in rhinologic research. The award will include a \$2000 cash prize from the American Rhinologic Society and from the Dr. Maurice H. Cottle Fund for Education and Research.

Both an abstract (100-2000 words) and the completed paper with illustrations and references in triplicate should be sent to Dr. Pat A. Barelli, Secretary, American Rhinologic Society, Penn Park Medical Center, 2929 Baltimore, Suite 105, Kansas City, Missouri 64108, on or before June 1, 1983. Manuscripts should not contain any indication of the author's identity of affiliation. All of this information should be included in a covering letter.

This award, usually presented annually, includes a \$500 cash prize; however for the Cottle Celebration, the 4th, 5th and 6th years will be combined.

## 28th ANNUAL SCIENTIFIC MEETING

New Orleans, Louisiana, October 16, 1982

The American Rhinologic Society will present its 28th Annual Scientific Meeting prior to the American Academy of Otolaryngology-Head and Neck Surgery.

Information: Pat A. Barelli,

2929 Baltimore, Suite 105, Kansas City, Missouri 64108, U.S.A.

### THE COTTLE CELEBRATION SYMPOSIUM

Itasca, Illinois, June 6-9, 1984

An International Symposium on nasal physiology and surgery, to be known as the "Cottle Celebration" will be held on June 6, 7, 8 and 9, 1984 at the Hamilton, 400 Park Boulevard, Itasca, Illinois. (20 minutes West of O'Hara Airport).

The Convention Planner's, Incorporated of Chicago have been contracted to help present this very important contribution to the late Dr. Cottle, Founder of the American Rhinologic Society.

Anticipated expenses to be offset by anticipated income may make this program a self-sustaining one to help the Dr. Cottle Fund for Education and Research. Dr. Leon Neiman, Akron, Ohio, is Chairman of the committee for organizing the "Cottle Celebration."

Information: Pat A. Barelli,

2929 Baltimore, Suite 105, Kansas City, Missouri 64108, U.S.A.

#### **European Rhinologic Society**

COURSE IN ADVANCED FUNCTIONAL NASAL SURGERY

# E.N.T.-Department of the University Erlangen, West Germany, March 2–5, 1983

The course is mostly devoted to colleagues having some experiences in this field. The course will include surgical demonstrations, lectures, panel discussions and cadaver dissections.

Registration and further informations by: Prof. H. Masing, Univ.-HNO-Klinik, Waldstr. 1 D-8520 Erlangen

## COURSE IN ADVANCED NASAL SURGERY

## Birmingham and Midland E.N.T.-Hospital, September 27–October 1, 1982

The above course will be largely devoted to surgery of the nasal septum and of the external pyramid. There will be an international panel of guest lecturers. The course will be quite comprehensive and will include lectures, televised operative demonstrations, films and opportunities for Cadaver dissection.

The University can give assistance in obtaining suitable residential accomodation either in a nearby hotel or in one of the University Halls of Residence.

Enrolment for the course is limited and early application is advised.

Course fee: £175.00 (Cheques should be made payable to the "University of Birmingham")

Enquiries and applications should be addressed to:

Mrs. V. R. Gilbert, Administrative Assistant, Board of Graduate Clinical Studies, The Medical School, Edgbaston, Birmingham 15, England

#### American Academy of Facial Plastic and Reconstructive Surgery

# THE FOURTH INTERNATIONAL SYMPOSIUM ON PLASTIC AND RECONSTRUCTIVE SURGERY OF THE HEAD AND NECK

will be held May 29-June 3, 1983 in the Century Plaza Hotel, Los Angeles, CA.

Information: Walter E. Berman, M.D. General Chairman Fourth International Symposium 9735 Wilshire Blvd. Berverly Hills, CA 90212, U.S.A.