PEMPHIGUS VULGARIS AND SQUAMOUS CELL CARCINOMA OF THE LARYNX

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Summary

A 40 year-old male patient who developed pemphigus vulgaris two years after developing squamous cell carcinoma of larynx is presented. The tumour was active at the time of development of pemphigus vulgaris. Pemphigus vulgaris lesions were controlled with corticosteroids even though the malignant tumour continued to show activity.

KEY WORDS: Pemphigus vulgaris; squamous cell carcinoma; larynx.

Introduction

Co-existence of pemphigus and malignancy has been described by various workers in the recent past[1-7], but such an occurrence is rare. Though pemphigus is not infrequent in India[8-11], so far only one case of pemphigus vulgaris associated with Hodgkin's disease has been reported from this country[12]. We are reporting a case of pemphigus vulgaris associated with squamous cell carcinoma of larynx.

Case Report

A 40-year-old male noticed pain and pricking sensation in his throat during swallowing of food and recurrent haematemesis since January 1981. He also complained of loss of weight and appetite during the following 6 months. Direct laryngoscopy showed a growth involving the right vallecula, aryepiglottic fold and lateral pharyngeal wall and extending on to the right epiglottis. A single lymph node on the right side of neck was enlarged, firm and fixed to the tissues. Biopsy from growth showed keratinising squamous cell carcinoma (Fig. 1). The growth regressed completely with irradiation of 5500 r given in September 1981 over a period of 21 days. In mid November, 1981, patient again had a bout of haematemesis and was found to be having recurrence of the growth in the larynx. At this time he was only given symptomatie treatment. On November 30, 1981, patient developed ulcerations on the palate and tongue which involved buccal mucosae and lips during the next 10 days. On December 12, 1981 he developed asymptomatic flaccid vesiculo-bullous lesions on the neck which spread all over the body during the next 4-5 days. At this time patient was seen by the dermatologists.

Cutaneous examination revealed flaccid vesiculo-bullous lesions as well as denuded raw areas on the neck, trunk, arms and lower extremities. Superficial ulcerations were present on the palate, buccal mucosae, tongue and lips. Systemic examination was essentially normal except for a growth involving the right hemi-larynx,

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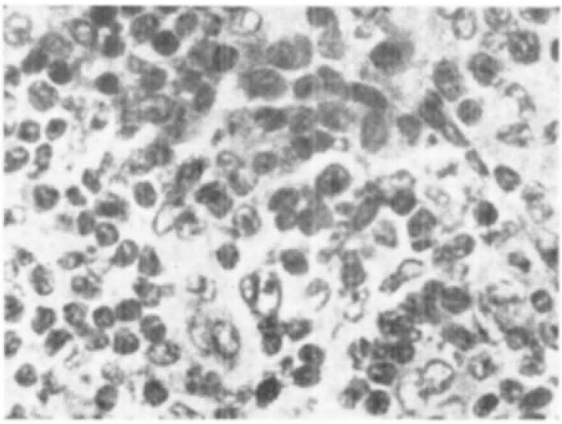

Fig. 1

Atypical cells of squamous cell carcinoma

pyriform fossa, true vocal cord, false vocal cord and arytenoid and enlarged fixed right upper deep cervical lymph nodes.

Routine examination of blood, urine and stool, liver function tests and skiagram of chest were essentially normal. Biopsy of the skin lesion showed intraepidermal split containing acantholytic cells (Fig. 2). Direct immunofluorescence of the skin biopsy specimen showed intraepidermal staining to polyvalent immunoglobulin.

Patient was initially treated with 60 mg of prednisolone daily for control of pemphigus but the dose had to be increased to 100 mg of prednisolone per day to control the activity of the disease. The growth in the larynx could not be excised because of extensive involvement of laryngeal and surrounding areas. Since the laryngeal growth kept on increasing in size, the patient was given a single dose of methotrexate 50 mg I.V. He developed leucopenia of 400/mm^3 after two days of methotrexate therapy. He was given 4 units of fresh blood, 2 injections of leucovorin calcium 3 mg I.M. at 6 hours interval, garamycin 80 mg I.M. twice daily and cloxacillin 500 mg four times daily. After 5 days, patient's blood pressure suddenly dropped to 70/50 mm of mercury and he complained of chest pain. E.C.G. was essentially normal. The patient expired the same evening. Autopsy could not be performed because of refusal by his relatives.

Discussion

Pemphigus vulgaris is fairly commonly seen in India[8-11]. The association

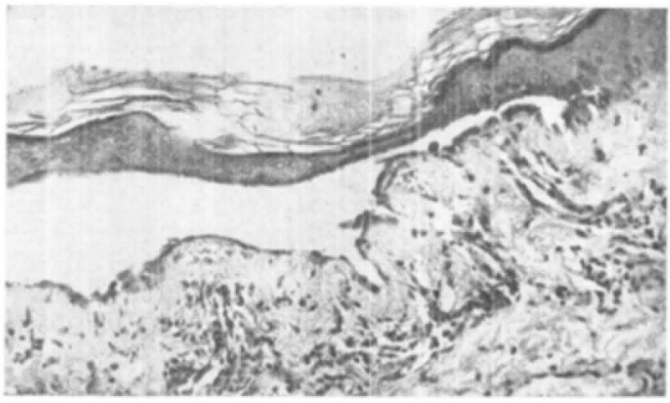

Fig. 2

Intraepidermal split containing acantholytic cells.

between pemphigus and malignancy, though known,[1-7] is rare. This is perhaps the second case report from this country showing such an association. The earlier case by Sood & Pasricha[12] developed pemphigus vulgaris two years after Hodgkin's disease was diagnosed. In the present case, the patient had squamous cell carcinoma of the larynx and developed pemphigus vulgaris after one year.

The exact pathogentic mechanism which causes pemphigus to occur in association with malignancy is not clear. Saikia[3] extracted IgG type of antiepithelial antibodies from tumour tissue from a patient having pemphigus vulgaris and lymphoid neoplasm, and feels that the pemphigus antibodies are probably produced by the tumour cells. Another explanation for this association could be that some carcinomas have an antigenic determinant similar to those found in the intercellular spaces of the epidermis[13], thus causing antigenic cross reactions to occur. Complete clearance of pemphigus lesions after amputation of limb having squamous cell carcinoma[2] has demonstrated association between epithelial malignancy and production of antibodies to epithelial tissue. The present case developed pemphigus vulgaris while having active growth of squamous cell carcinoma of the larynx.

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