Prolonged Survival in Bronchogenic Carcinoma Complicated by Superior Vena Cava Obstruction

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Abstract. Prolonged survival in patients with bronchogenic carcinoma and superior vena cava syndrome is rare. One patient with this syndrome due to epidermoid carcinoma of the lung has survived 10 years following radiation therapy. Occasional patients with superior vena cava syndrome due to lung carcinoma may have long periods of disease-free survival. Therefore, curative radiation therapy is indicated for this condition.

Key words: Superior vena cava obstruction, survival – Superior vena cava obstruction, treatment

Introduction

Obstruction of the superior vena cava by bronchogenic carcinoma is an ominous complication. Nogierie et al. recently reviewed the literature and found six patients with histologically proven bronchogenic carcinoma who survived more than 36 months [4]. They reported three additional patients who had prolonged survival. Recently another such case has been described [5]. We report an individual who survived for ten years after radiation therapy for superior vena cava syndrome secondary to bronchogenic carcinoma.

History

A 54 year old man was admitted on 14 April 1970 to the Albert Einstein College Hospital for pains in the wrists and legs of 4 months’ duration. Three weeks prior to admission he noted onset of cough productive of clear, blood-streaked sputum. During the prior two weeks, he had lost 5 kg of weight. Physical examination on admission showed engorgement of the veins of the face and chest and clubbing of the fingers. Chest roentgenogram showed a large tumor mass in the right upper lobe with

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Fig. 1. Tomogram, 19 April 1970, shows right upper lobe mass lesion

The mass was pressing on the trachea and pushed it posteriorly and to the left. Tomography (Fig. 1) revealed obstruction of the bronchi to the right apical and right posterior segments. Superior vena cavagram revealed obstruction of the superior vena cava at its junction with the right subclavian vein and partial obstruction of the left innominate vein. Adequate collateral vessels were visualized. Sputum cytology on two different days revealed poorly differentiated epidermoid carcinoma. The patient developed orthopnea in the hospital. He received 5,000 rads to the mediastinum and the right upper lobe and improved symptomatically during the next two weeks.

The patient was re-admitted three months later with a large pericardial effusion and tamponade. 800 ml of bloody pericardial fluid, containing $2 \times 10^6$ red blood cells