

A Peculiar Case of Choriocarcinoma Syndrome

Toufic Tannous, Matthew Keating

Roger Williams Medical Center/Boston University

Introduction

Choriocarcinoma syndrome (CS) occurs high risk male patients with a testicular non seminomatous germ cell tumor (TNSGCT), mostly Choriocarcinoma, with pulmonary metastasis, and an elevated B-HCG level above 50,000 mIU/ml . Characterized by acute respiratory distress syndrome (ARDS) due to Diffuse Alveolar hemorrhage (DAH) and tumor site bleeding post chemotherapy

Materials and Methods

Published cases of CS in males with TNSGCT were collected and summarized. We describe our own case of CS as well

Bronchoscopy showing DAH



Results

A previously healthy 29-year-old male presented with one month of worsening dyspnea and scrotal swelling. His physical exam revealed tachycardia, decreased breath sounds and a right testicular mass. Labs include B-HCG level of 1,063 mIU/ml (0.5 - 5mIU/ml), AFP 26157 ng/ml (0 - 9 ng/ml), LDH 1,671 U/L (140 - 271 U/L), TSH<0.01 uIU/ml (0.34 - 5.6 uIU/ml). CT of the chest, abdomen and pelvis revealed multiple pulmonary masses, and an 11.7 cm testicular mass. Brain MRI showed multiple brain lesions. After orchiectomy, pathology revealed high grade mixed Germ cell tumor composed of choriocarcinoma (50%), yolk sac tumor (45%) and embryonal carcinoma (5%). After starting on etoposide, ifosfamide cisplatin (VIP) he became acutely hypoxemic developed ARDS and required intubation. Chest CT demonstrated new ground glass-glass opacities surrounding the pulmonary nodules. Bronchoscopy confirmed DAH. He eventually went into cardiac arrest

Pulmonary nodules and surrounding edema



Table 1: CS cases reported throughout the years

Period	Reports (n)	Cases (n)	Gonadal (n)	Extra-Gonadal (n)	Received chemo	BHCG>50k	BHCG<50k	Mortality (%)
1980-1989	2	6	6	0	6	6	0	3 (50)
1990-2000	2	12	11	1	12	12	0	12 (100)
2001-2010	5	31	30	1	31	31	0	23 (74)
2011-2020	7	8	4	4	8	8	0	3 (37.5)
Total	16	57	51	6	57	57	0	41 (71.9)

Conclusions

Summarized in Table 1 are all the published CS findings. All the cases seen have a B-HCG level above 50,000 mIU/ml, as opposed to ours: 1,063 mIU/ml. We suggest re-evaluating the quantitative role of B-HCG in defining high risk groups