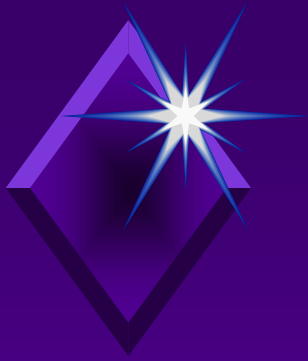


Superior vena cava syndrome: a case report

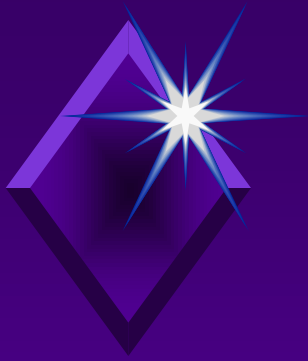
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Dept. of Dermatovenereology, Masaryk
University Faculty of Medicine, and St.
Anne's Faculty Hospital in Brno
CZECH REPUBLIC



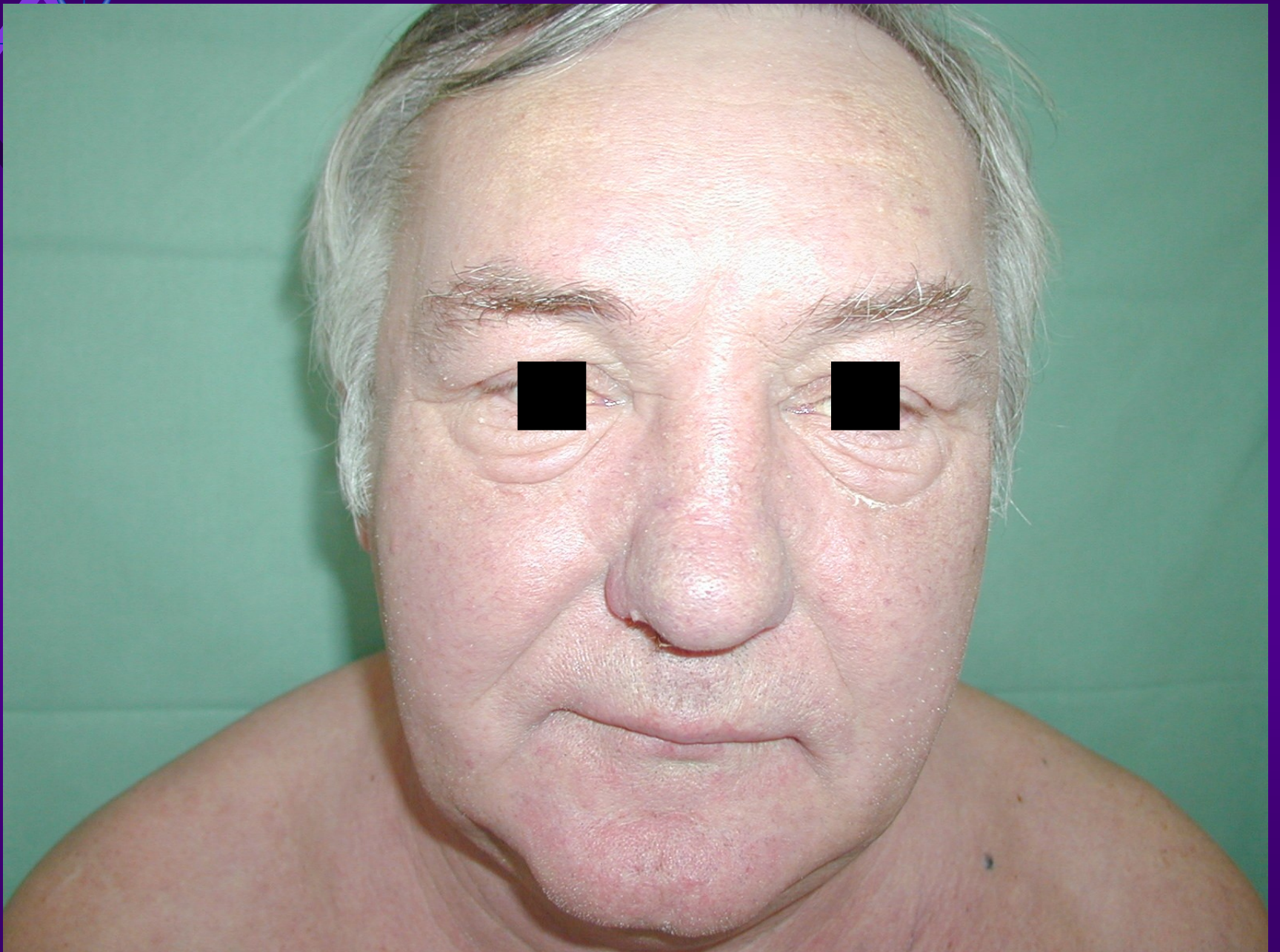
Personal history:

- ◆ Patient: V. S. , born in 1943
- ◆ PH: CHOPD
- ◆ Medication: negative
- ◆ Allergies: negative
- ◆ smokes 20 cigarettes daily

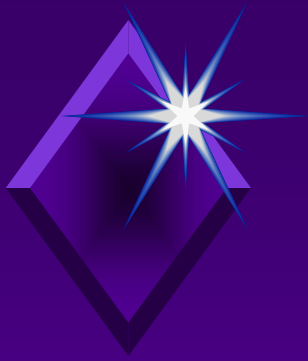


Course of the disease

- ◆ sent to the emergency department of DVC by his GP because of 4 days lasting **swelling** of the face as susp. allergic angioedema,
- ◆ nothing unusual done, did not take any medication, alimentary history without anything suspicious, **admitted to hospital**



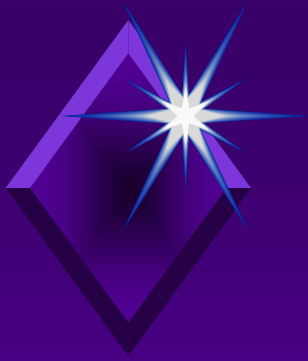




Differential diagnosis

- ◆ Acute angioedema (Quincke) allergic/nonallergic
- ◆ Allergic contact dermatitis/toxic contact dermatitis
- ◆ Cardial swelling
- ◆ Nephrogenic swelling
- ◆ Lymphoedema
- ◆ Abscess, cellulitis
- ◆ Trichinosis (trichinellosis), Trypanosomiasis
- ◆ Heliotropic swelling - dermatomyositis
- ◆ **Superior vena cava syndrome**
- ◆ Cushing syndrome
- ◆ Thyroid disease - myxoedema





Further investigation

- ◆ SR 34/62 IgE 359 IU/ml
- ◆ PSA 6,15 ug/l
- ◆ Chest X-ray: pulmonary parenchyma without any clear infiltration or deposits. Sizeable extension of the mediastinum to the right-hand side by a **mass measuring 10 x 4 cm** causing a deviation of trachea to the left. The tip of the right lung with pleural thickening. Diaphragm normal. Heart shadow unextended

DX1/1

Fakultni nemocnice U sv. Anny - Brno

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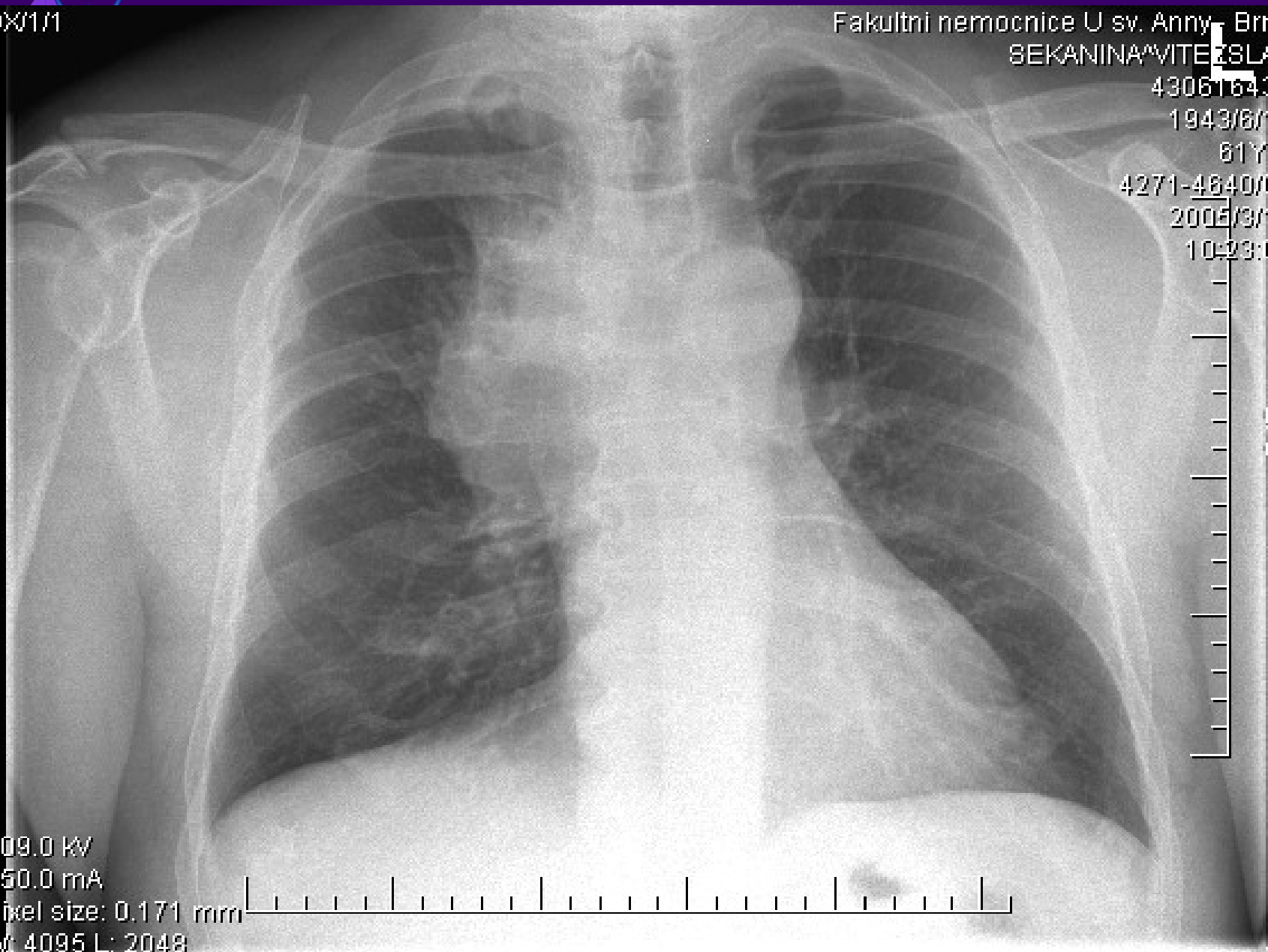
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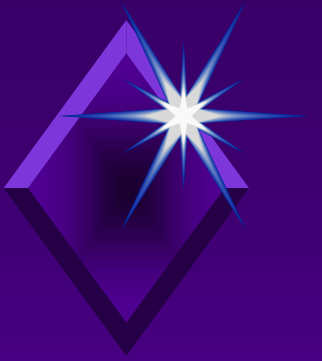
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250.0 mA

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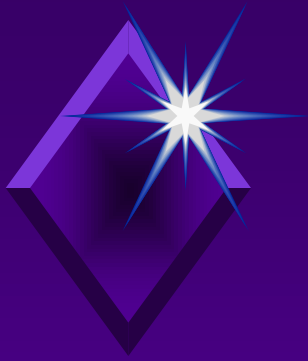




Further investigation and course:

- ◆ Pneumology Consilium
- ◆ Syndroma venae cavae superioris with acute course, **TU of the mediastinum susp.**

Patient transferred to pulmonary clinic at FUHB, bronchoscopy with histology: **Small cell carcinoma of the upper lobe of the right lung**



Treatment

◆ I. Course of CHT:

4 cycles cbdc (carboplatine, cyclophosphamide) according to AUC 5 and ifosfamide

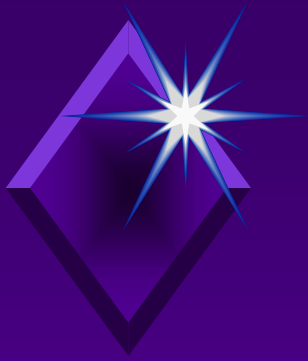
+ **Concomitant RT** of the chest (30 Gy)

recurrence of the sy VCS due to the progression of the underlying disease

II. Course of CHT:

cisplatin, doxorubicin

due to significant toxicity untimely terminated symptomatic treatment



Further course

- ◆ significant swelling, shortness of breath, cough disturbing sleep
admitted to hospital at pulmonary clinic
symptomatic treatment with
bronchodilators, antiedematous medication, analgesics, antibiotics due to elevated CRP

exitus letalis: in bed rest with symptoms of terminal bronchopneumonia

DEATH within 10 month of the dg of SVC sy



Superior vena cava syndrome

- ◆ first described by W. Hunter in the year 1757 caused by poor blood flow through SVC into the right atrium of the heart caused by:
 - **Extravascular pressure**
(tumor, enlarged lymph. nodes)
 - **Intraluminal problem**
(thrombosis, tumor)



Superior vena cava syndrome

Causes: 70% malignant

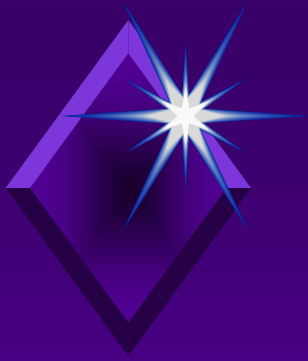
- ◆ bronchogenic carcinoma (cca 70%)
- ◆ lymphomas (mostly NHL) (cca 10%)
- ◆ metastases into mediastinal LN (cca 10%)
(kidney tu, testical, ovarial tu, breast ca)
- ◆ primary mediastinal tu (thymoma 2%)
- ◆ other



Superior vena cava syndrome

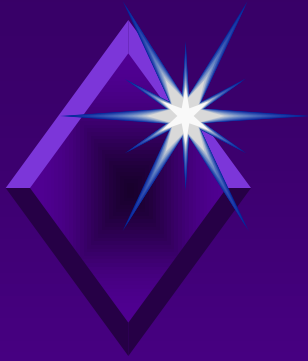
Causes: 30% benign

- ◆ benign tumors (thymoma, teratoma ...)
- ◆ retrosternal struma
- ◆ aortal aneurysm, pericarditis
- ◆ thrombosis (catheter in SVC, electrode of PM)
- ◆ septic thrombosis, thrombophlebitis
- ◆ postirradiation fibrosis, fibrosing mediastinitis
- ◆ TB, syphilis, sarcoidosis



Clinical presentation

- ◆ Swelling of the head and neck (and arms)
- ◆ Cyanosis, plethora
- ◆ Dilated subcutaneous veins
- ◆ Cough, dyspnea, stridor, hoarseness
- ◆ Headache, vertigo, confusion
- ◆ Nasal congestion, epistaxis
- ◆ Syncope



Diagnostics

- ◆ chest X-ray

 - when susp. bronchogenic ca

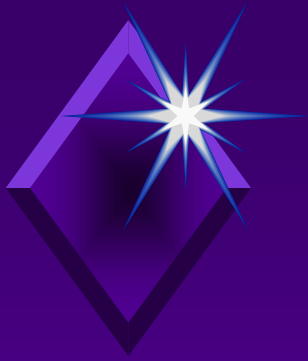
 - bronchoscopy
 - transparietal puncture under CT control
 - mediastinoscopy
 - videothoracoscopy, thoracotomy

- ◆ CT or angio CT

- ◆ NMR, PET

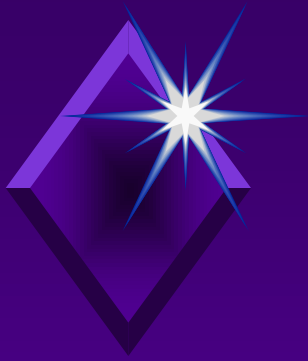
- ◆ invasive contrast venography

- ◆ transoesophageal sonography



Treatment

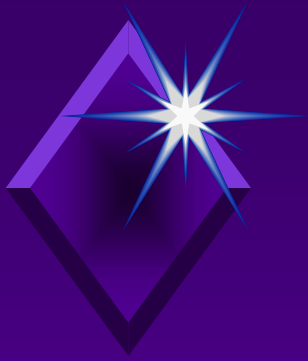
- ◆ **causative treatment:** depends on etiology of SVCS
 - surgery
 - RT
 - chemotherapy
 - thrombolysis
- ◆ application of a stent into SVC
- ◆ **symptomatic treatment:**
 - elevation of the head, oxygenotherapy
 - corticosteroids: reduction of the swelling around tumor
 - diuretics



Conclusion

SVC syndrome should be considered in every case of **swelling of the head and neck without any apparent cause** , especially when associated with dilatation of veins of the neck and collateral venous circulation or with other symptoms

Dermatologist should provide diagnosis and treatment in a specialized center



Thank you for your attention