Acute Oncology Service Clinical Guidelines

Superior Vena Cava Obstruction

Causes

Most commonly due to:

- Primary tumours: 80% from lung (majority small cell), much rarer in lymphoma (15%), thyroid, thymus, teratoma.
- Secondary tumours (virtually any).
- Thrombosis PiCC or Groshong line .
 Idiopathic Venous Thrombosis.

Symptoms

Typically slow in onset.

Shortness of breath is the most common symptom and is observed in 63% of patients with superior vena cava obstruction (SVCO).

Swelling and puffiness of the face and neck as well as one or both arms.

Feeling of fullness or tightness of the head (headache), unable to open eyes fully, worse in the morning or on bending forwards.

Difficulty breathing.

Chest Pain.

Distended veins on chest and arm.

Other symptoms include cough, arm swelling, dysphagia, orthopnea, distorted vision, hoarseness and stridor

Signs

Venous distension of the neck and chest wall, facial edema, upper extremity edema, mental changes, plethora, cyanosis, papilledema, stupor, and even coma.

• Bending forward or lying down may aggravate the symptoms and signs. Check for other lumps and bumps, look for distended veins (jugular) and collateral circulation, examine for clues to the cause.

Investigations

Chest X-Ray

CT scan with contrast.

Biopsy if this is a new presentation with cancer

Doppler USS or venogram.

Management

- Airway, breathing, circulation resuscitation
- Elevate the head of the bed and give oxygen.
- Dexamethasone 8mg bd with proton pump inhibitor for gastric protection (but try and avoid giving this in a new diagnosis of cancer as this may affect the biopsy e.g. in lymphoma)
- CXR
- CT
- Biopsy if not already known cancer
- Inform acute oncology service bleep 1942



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Treatment

- Radiotherapy
- Chemotherapy
- Stenting (relief of symptoms pending diagnosis, treatment when radiotherapy/chemotherapy have failed, in presence of cerebral oedema)

Treatment will vary according to histology hence this is why it is vital to obtain a biopsy. Chemotherapy should be offered in cases caused by small cell lung cancer or lymphoma – therefore contact Oncology or Haematology as soon as possible.

- If patient is very unwell and URGENT treatment is required, instant relief can be obtained with insertion of a self-expanding vascular stent.

 Not all patients are suitable for stent insertion, discuss with Consultant Radiologist as soon as possible.
- If there is associated SVC thrombosis then anticoagulate with LMW heparin. The role of prophylactic anticoagulation against SVC thrombosis unclear, however most patients will be at high risk of venous thrombosis elsewhere i.e. DVT whilst an inpatient and should receive prophylactic LMW heparin.