





SUPERIOR VENA CAVA OBSTRUCTION

INTRODUCTION

Superior vena cava (SVC) obstruction is an acute pathophysiological condition secondary to its obstruction by external compression, intraluminal thrombosis, or direct tumour invasion, resulting in the obstruction of venous return of blood from the head, upper limb and thorax to the right atrium. The most common aetiology of SVC obstruction is malignancy, particularly bronchogenic carcinoma, lymphomas followed by other benign causes (e.g. thrombus, venous catheters and cardiac devices).

ASSESSMENT

 Assessment must determine the underlying cause of obstruction, effectiveness of treatment and impact on quality of life for the patient and their family (refer to the Guideline - Symptom Assessment)

• Symptom Assessment

- Breathlessness
- Sensation of choking
- ➤ Headache, visual disturbances
- Dizziness, syncope
- Cough, hoarseness of voice
- Swelling of face, neck and arms
- > Fullness of the head

• Examination - signs

- Rapid breathing
- Peri-orbital/facial/neck/arm oedema
- Conjunctival oedema (chemosis)/facial plethora
- Dilated neck and collateral veins
- Fixed raised JVP
- > Stridor
- Cyanosis
- Papilloedema Late feature

Investigations

- > X-ray chest
- Contrast Enhanced CT scan chest
- Venous Angiogram







➤ Biopsy: urgent histopathology - is essential to start on appropriate treatment (discuss with radiologist, pulmonologist, thoracic surgeon to decide on the best way to obtain tissue for histopathology)

MANAGEMENT

Recommendation

- SVC obstruction is an oncological emergency
- Should be managed by a multidisciplinary team (respiratory physician, medical/radiation oncologist, radiologist, nurse, psychologist, physiotherapist, occupational therapist and palliative care physician)
- > Stenting (with or without thrombolysis) of the superior vena cava can be considered as initial treatment or for relapse
- Once histopathology is obtained appropriate oncological treatment should be initiated
- All procedures such as drawing of blood, measuring blood pressure, giving intravenous injections or fluids should be avoided on the affected limb

Chemotherapy

Palliative or radical chemotherapy may be used for tumours that are sensitive to chemotherapy e.g. small cell lung cancer, lymphomas, germ cell tumours

Radiotherapy

Palliative radiotherapy to the mediastinum is the treatment of choice for tumours which are not sensitive to chemotherapy or have relapsed after chemotherapy e.g. non-small cell lung cancer

• Symptomatic management

- Propped up position
- Loose clothing and pillow support for upper arms
- Analgesics (WHO Analgesic Ladder as appropriate)
- Corticosteroids to be started after histopathology is obtained
 - ❖ 16mg PO OD or 8mg PO bd to be administered before 2 pm and to be given as a single dose even after 2 pm, if it is the initial dose
 - If unable to take oral medications, dexamethasone to be administered subcutaneously or intravenously
 - Continue dexamethasone while patient is on radiotherapy
 - Continue to review and reduce gradually in those who have responded
 - Stop, if not helpful after five days





PALLIATIVE CARE GUIDELINES FOR A HOME SETTING IN INDIA

- ❖ Use a Proton Pump Inhibitor (PPI) as gastro-protector
- Opioids (for breathlessness)
 - Morphine 5mg PO q4h and prn, with or without benzodiazepines (for anxiety)
- Oxygen to be considered and may have to be continued, if patient is hypoxic

REFERENCES

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