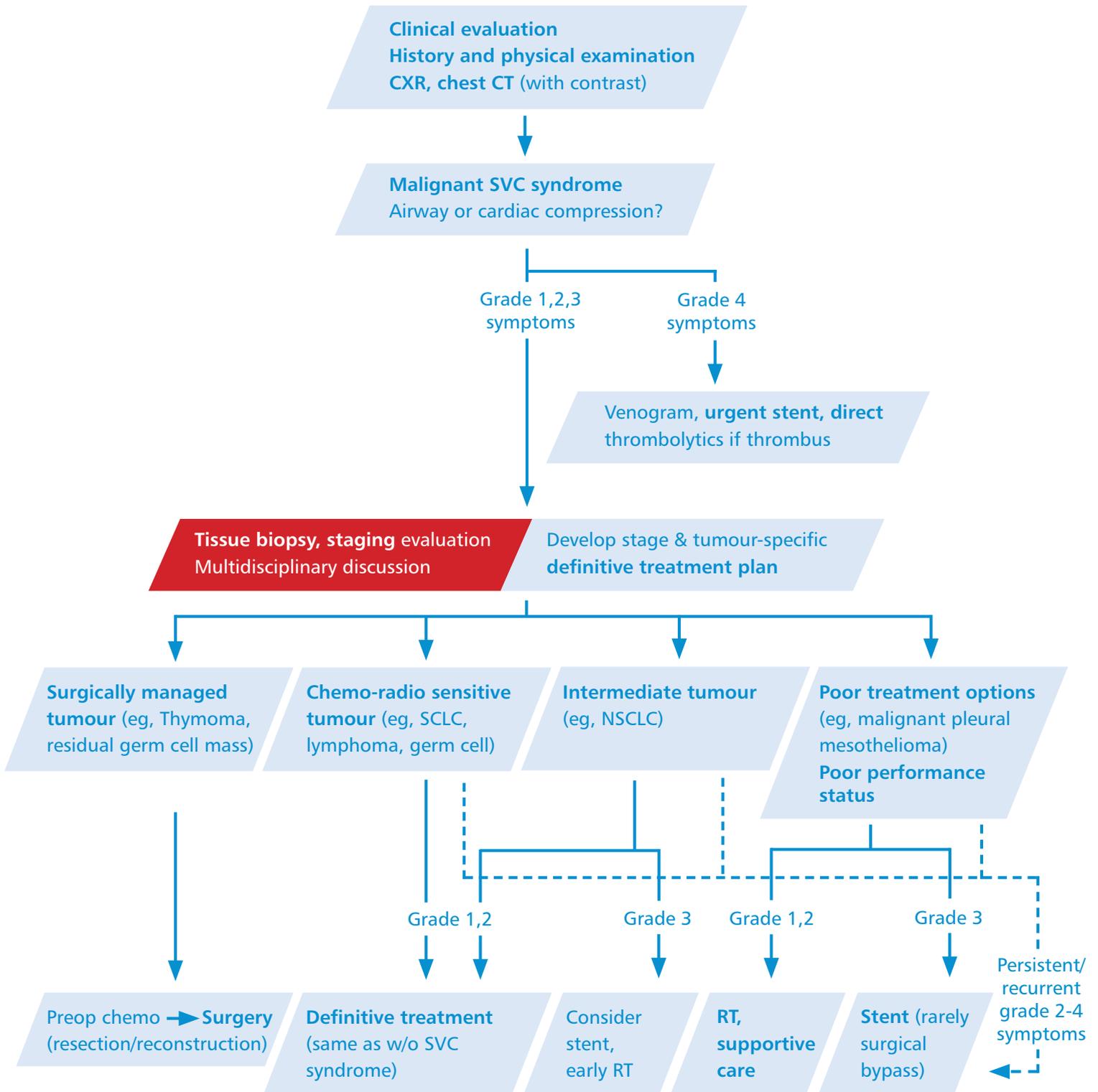


Diagnostic Algorithm for superior vena cava obstruction (SVCO)



Signs and symptoms of superior vena cava obstruction (SVCO)

SVCO is caused by external pressure, thrombus or direct tumour invasion causing obstruction of the superior vena cava and occurs in 5-10% of patients with right-sided thoracic malignancy

Signs

- Symptoms may be gradual or have an acute onset depending on how quickly a partial obstruction becomes a complete obstruction and the level of collateralisation
- Dyspnoea
- Dilated veins over trunk, arms, neck
- Fixed elevated jugular venous pressure (JVP)
- Face/arm swelling
- Flushing
- Chest pain
- Cough
- Headaches
- Coma/Confusion

Note: Symptoms may be made worse by postures where venous pressure in upper body is increased (i.e lifting arms or bending forward)

Patients at Risk

- Lung cancer (70% of cases)
- Lymphoma
- Thymoma
- Thyroid cancer
- Teratoma
- Non-malignant causes include: mediastinitis, fibrosis, ascending aortic aneurysm, thrombus due to indwelling intravascular devices (central venous catheter, pacemaker)

What to do

- **HISTORY** - When a patient presents with signs or symptoms suggestive of SVCO, a comprehensive history and physical examination is required to assess their immediate physical needs.
- **HISTORY** - A chest xray and a chest CT (with contrast) is required
- **ACTION** - In the majority of cases this is not an emergency. Refer to algorithm

TREATMENT

- Encourage sitting position, oxygen, steroids
- SVC stenting +/- thrombolysis – quick relief in 95% of patients, patency rate at 8 months 92%
- Exception: young patients with chemosensitive disease (lymphoma, teratoma)
- Radiotherapy/chemotherapy in some situations (not emergency)
- Anticoagulation if clot (low molecular weight heparin)

<http://guidance.nice.org.uk/IPG79/Guidance/pdf/English>