



## ONCOLOGICAL EMERGENCIES

Oncological Emergency	Exercise consideration
<b>Spinal Cord Compression</b>	<p>Presents as:</p> <ul style="list-style-type: none"> <li>• Localized back pain, primarily in thoracic region</li> <li>• Pain escalating with lying supine, at night</li> <li>• Muscle weakness below area of spinal involvement</li> </ul> <p>Management Recommendation:</p> <ul style="list-style-type: none"> <li>• Early identification</li> <li>• Routine pain assessment</li> <li>• Low threshold for escalation for medical management especially in setting of sudden neurological changes (e.g. strength, loss of bladder/bowel control)</li> </ul>
<b>Malignant pericardial effusion</b>	<p>Presents as:</p> <ul style="list-style-type: none"> <li>• Dyspnoea, cyanosis, engorged neck veins, orthopnea, congested cough, fatigue, palpitations, drop in systolic blood pressure of &gt;10mmHg during inspiration</li> <li>• Hypotensive, tachycardic, narrow pulse pressure, diaphoretic</li> </ul> <p>Management Recommendation:</p> <ul style="list-style-type: none"> <li>• Frequent assessment of heart rate, oxygen saturation and haemodynamic status</li> <li>• Assessment of skin colour and temperature, capillary refill and peripheral pulses</li> <li>• Monitor mental status changes</li> </ul>
<b>Superior vena cava syndrome</b>	<p>Presents as:</p> <ul style="list-style-type: none"> <li>• Swelling in upper body, face, neck</li> <li>• Jugular vein distention</li> <li>• Dyspnoea, dry cough, tachycardia, hypotension, cyanosis, cough, tachynoea, dyspnea</li> <li>• Confusion, headache, visual changes</li> </ul> <p>Management Recommendation:</p> <ul style="list-style-type: none"> <li>• Heart rate response to activity may be impaired</li> </ul>

	<ul style="list-style-type: none"> <li>• Use Rate of Perceived Exertion (RPE) scale as a more sensitive measure during activity</li> <li>• Heart rate</li> <li>• Symptom recognition and observation of change over time to support differential diagnosis</li> </ul>
<b>Hypercalcaemia</b>	<p>Presents as:</p> <ul style="list-style-type: none"> <li>• Constipation, lethargy, fatigue, bone pain, abdominal pain, polyuria, muscle weakness, confusion, delirium</li> </ul> <p>Management Recommendation:</p> <ul style="list-style-type: none"> <li>• Weight bearing activities along with general aerobic conditioning</li> <li>• If severe, patient will be medically unresponsive and inappropriate for participation in exercise</li> <li>• Consider assistive devices for safety with ambulation</li> <li>• Assess mental status changes and impact on safety judgement</li> </ul>
<b>Tumor lysis syndrome</b>	<p>Presents as:</p> <ul style="list-style-type: none"> <li>• Weakness, fatigue, lethargy, arthralgia</li> <li>• Typical onset: 6-72 hours after chemotherapy delivery</li> </ul> <p>Management Recommendation:</p> <ul style="list-style-type: none"> <li>• Closely monitor changes to weakness, muscle cramping, dysrhythmias, dyspnea, central nervous system changes, and irregular heart rhythms</li> </ul>
<b>Neutropenic fever</b>	<p>Presents as:</p> <ul style="list-style-type: none"> <li>• Presence over fever &gt;38 deg celcius</li> </ul> <p>Management Recommendation:</p> <ul style="list-style-type: none"> <li>• Rehabilitation not contraindicated</li> <li>• Ensure regular cleaning of equipment and hands</li> <li>• Avoid group exercise as required</li> </ul>
<b>Venothrombotic events</b>	<p>Presents as:</p> <ul style="list-style-type: none"> <li>• DVT presenting with swelling in the extremity, redness and extreme tenderness</li> <li>• Pulmonary embolism presenting with dyspnea,</li> </ul>

	<p>tachycardia, crackles, haemoptysis, chest pain, tachypnea and anxiety</p> <p>Management Recommendation:</p> <ul style="list-style-type: none"><li>• Cease exercise immediately and seek urgent medical intervention</li><li>• Monitor pharmacological interventions that may be altering the patient's platelet activity and clotting</li><li>• Monitor for the above symptoms with low threshold for escalation of care</li></ul>
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**Reference:**

*Maltser S, Cristian A, Silver JK, Morris GS, Stout NL. A Focused Review of Safety Considerations in Cancer Rehabilitation. PM R, 2017, Sep;9(9) :S415-S428*