

## Practice summary sheet

### Module 4: Extra-articular features of rheumatoid arthritis (RA) and co-morbid conditions

- Morbidity and mortality associated with **cardiovascular disease** is one of the most common extra-articular manifestations related to RA. *Monitor cardiovascular status closely* and address risk factors for cardiovascular disease. If in doubt, on-refer.
- On-refer **early to a GP for further investigation** if you notice **changes** in a patient's **cardiopulmonary capacity** and exercise tolerance.
- On-refer to a GP if you suspect **skin cancers**

#### Extra-articular features of RA

Body system	Manifestation	What to look for
<b>Skin</b>	<p>Nodules <a href="#">click to see image in Module 4</a></p> <p>Raynaud's Sign</p> <p>Major cutaneous vasculitis*</p>	<p>Single/ multiple subcutaneous nodules &gt;5mm diameter. Usually painless and on extensor surfaces.</p> <p>Colour change (paleness) of fingers/toes in response to cold or stress</p> <p>Red/purple skin spotting which doesn't blanch with pressure. Leg ulcers and peripheral gangrene</p>
<b>Pulmonary</b>	<p>Bronchiolitis obliterans organizing pneumonia (BOOP)</p> <p>Pleuritis* and pleural effusion</p> <p>Interstitial lung disease*</p>	<p>Dry cough, dyspnoea, wheezing, crackles on auscultation</p> <p>Sharp chest pain with deep breathing, coughing, sneezing, laughing</p> <p>Dyspnoea, cough</p>
<b>Cardiovascular</b>	<p>Pericarditis*</p> <p>Vasculitis</p> <p>Ischaemic Heart Disease</p>	<p>Chest pain, dyspnea, palpitations.</p> <p>Signs of ischaemia/necrosis in affected organs/ tissues.</p> <p>Reduced cardiac capacity</p>
<b>Neurological</b>	<p>Mono neuritis multiplex* or peripheral neuropathy</p>	<p>Acute sensory and/or motor neuropathy in one or more nerve trunks secondary to vasculitis, compression or diabetes</p>
<b>Visual</b>	<p>Sjögren's syndrome</p> <p>Episcleritis or scleritis* <a href="#">click to see image</a></p>	<p>Dry eyes and mouth +/- skin, nose and vaginal dryness</p> <p>'Red eye' - redness of the white part (sclera) of the eye, eye pain with possible radiation to the jaw, photophobia, decreased visual acuity</p>
<b>Haematological</b>	<p>Felty's syndrome*†</p>	<p>High rate of bacterial infections, fever, weight loss, fatigue.</p>
<b>Skeletal body System</b>	<p>Osteoporosis</p>	<p>Minimal trauma fracture, height loss. Be vigilant about bone fragility</p>

\* severe manifestations † defined as chronic polyarthritis, neutropenia and splenomegaly. SOURCE: [Briggs et al 2013](#)

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### Co-morbid conditions and complications

Body system	Co-morbidities/ Complications	What to look for
<b>Neurological</b>	Cervical myelopathy*	Neck pain, upper limb pain, sensory and motor changes in upper limbs, gait disturbances.  Be vigilant about possible cervical spine instability (C1/2 specifically). <i>Avoid strong manual therapy techniques in the upper cervical spine. On-refer if in doubt</i>
<b>Metabolic / Endocrine</b>	Osteoporosis	Minimal trauma fracture, height loss. Be vigilant about bone fragility ( <i>consider exercise type, intensity and avoid use of strong manual therapy techniques if severe osteoporosis</i> ).
	Steroid-induced diabetes	Painful peripheral neuropathy

\* occurs as a consequence of subluxation of cervical spine joints. SOURCE: [Briggs et al 2013](#)

### Management Considerations:

- Extra-articular features can cause considerable disability and **MUST** be considered and monitored when formulating individualised physiotherapy management plans and goals.
- Work with patients to address modifiable risk factors such as obesity, smoking and alcohol. Use education and exercise based strategies including liaising/referring to other multidisciplinary team members.