bpacnz PRIMARY CARE UPDATE SERIES

POLYMYALGIA RHEUMATICA (PMR) – proceed with caution

Key practice points:

- The classical presentation of PMR is a patient aged >50 years, of European ethnicity, who experiences rapid onset of aching pain and morning stiffness lasting >30 minutes, that is predominantly bilateral at the shoulders and/or hip girdle, and may also involve the neck
  - Symptoms are generally worse with inactivity or at night
  - CRP levels are usually raised (or sometimes ESR is raised and CRP is not)
- Assessment of the patient includes:
  - Exclusion of other possible causes of symptoms, e.g. rheumatoid arthritis, active infection
  - Looking for evidence of cranial symptoms, e.g. new-onset temporal headache, temporal artery tenderness, jaw/tongue pain when chewing or visual impairment; this may indicate the patient also has giant cell arteritis (GCA) which is present in one in five patients with PMR, and presents a more serious clinical scenario than PMR alone
- In patients where PMR is likely, a clinical diagnosis can be confirmed by their response to corticosteroid (prednisone) treatment (Table 1)
- The patient's response to prednisone should be primarily based on their clinical status, e.g. ability to perform movements and tasks that were previously impaired – symptoms should generally improve within 24–48 hours
  - If there is no response within one week, the diagnosis should be re-considered; if PMR is still considered likely, then a trial of a higher prednisone dose can be considered
  - CRP (or ESR) levels should also be monitored if they were initially raised; these should normalise within two to three weeks
- Following two to four weeks of successful treatment, the dose of prednisone should be gradually tapered (Table 1); this should be done in response to symptom improvement, not CRP (or ESR) alone
  - Relapses are common during this time and if they occur the prednisone dose should be increased back to pre-relapse levels
- PMR is usually a self-limiting condition and there is no evidence that PMR alone increases mortality or causes structural damage
  - While the aim is to stop prednisone use as soon as possible, the average duration of treatment in patients with PMR is 18 months (longer if they have GCA)
  - Long-term treatment decisions should take into account the adverse effects associated with prolonged corticosteroid use on a case-by-case basis, e.g. osteoporosis, adrenal suppression, steroid-induced diabetes and gastritis

Table 1. General treatment regimens for patients with PMR.

	Initial prednisone dose	Tapering protocol once there is a treatment response	Possible duration of treatment
PMR alone	**In general: 15 mg/day for 2–4 weeks** • Mild symptoms, relevant co-morbidities or other risk factors for corticosteroid-related adverse effects, or frail patient: 7.5–10 mg/day • Severe initial symptoms: 20 mg/day • Refractory symptoms after one week: consider increasing dose from 15 → 20 mg/day	Reduce by 2.5 mg every 2–4 weeks until at 10 mg/daily, then reduce dose by 1 mg every month; refer patient if dose cannot be decreased below 10 mg/daily	Patients often need to stay on 5 mg prednisone to remain symptom free, with the average duration of use being 18 months. Some patients may need 2–3 years of prednisone use in total (sometimes longer).
PMR + GCA	**In general: 60 mg/day for 2–4 weeks** (+ refer the patient for temporal artery biopsy) • or 1 mg/kg for patients with a low BMI (<18.5 kg/m^2)	Most patients should be able to taper from 60 mg to 20 mg daily over 2–3 months, then from 20 mg to 10 mg daily over 2–3 months, then a more gradual tapering from 10 mg (e.g. in 1 mg increments every 4–8 weeks provided there are no relapses)	Patients may need a longer duration of prednisone use than for PMR alone (see above).

Abbreviations: CRP, C-reactive protein; ESR, erythrocyte sedimentation rate.