Body System: Geriatrics		
Session Topic: Polymyalgia Rheumatica and Myositis		
Educational Format		**Faculty Expertise Required**
REQUIRED	Interactive Lecture	Expertise in the field of study. Experience teaching in the field of study is desired. Preferred experience with audience response systems (ARS). Utilizing polling questions and engaging the learners in Q&A during the final 15 minutes of the session are required.
OPTIONAL	Problem-Based Learning (PBL)	Expertise teaching highly interactive, small group learning environments. Case-based, with experience developing and teaching case scenarios for simulation labs preferred. Other workshop-oriented designs may be accommodated. A typical PBL room is set for 50-100 participants, with 7-8 each per round table. Please describe your interest and plan for teaching a PBL on your proposal form.

Professional Practice Gap	**Learning Objective(s) that will close the gap and meet the need**	**Outcome Being Measured**
• Family physicians encounter a significant number of rheumatologic problems in the course of practice and should be familiar with the clinical presentation, diagnostic criteria, and initial treatment for various rheumatologic conditions, with special emphasis on osteoarthritis, gout, rheumatoid arthritis, lupus erythematosus (LE), and polymyalgia rheumatic. FP also need to be aware of the advent of a new class of drugs known as biologics has revolutionized the treatment of rheumatoid arthritis (RA). • Polymyalgia rheumatica frequently goes undiagnosed. • Polymyalgia rheumatic often goes untreated.	1. Recognize early symptoms of PMR. 2. Differentiate PMR from other entities mimicking PMR. 3. Order appropriate test to differentiate PMR from other conditions. 4. Employ appropriate treatment strategies for PMR.	Learners will submit written commitment to change statements on the session evaluation, indicating how they plan to implement presented practice recommendations.

ACGME Core Competencies Addressed (select all that apply)			
X	Medical Knowledge		Patient Care

	Interpersonal and Communication Skills		Practice-Based Learning and Improvement
	Professionalism		Systems-Based Practice

Faculty Instructional Goals

Faculty play a vital role in assisting the AAFP to achieve its mission by providing high-quality, innovative education for physicians, residents and medical students that will encompass the art, science, evidence and socio-economics of family medicine and to support the pursuit of lifelong learning. By achieving the instructional goals provided, faculty will facilitate the application of new knowledge and skills gained by learners to practice, so that they may optimize care provided to their patients.

- Provide up to 3 evidence-based recommended practice changes that can be immediately implemented, at the conclusion of the session; including SORT taxonomy & reference citations
- Facilitate learner engagement during the session
- Address related practice barriers to foster optimal patient management
- Provide recommended journal resources and tools, during the session, from the American Family Physician (AFP), Family Practice Management (FPM), and Familydoctor.org patient resources; those listed in the References section below are a good place to start
    - Visit http://www.aafp.org/journals for additional resources
    - Visit http://familydoctor.org for patient education and resources
- Provide recommendations for recognizing early symptoms of PMR.
- Provide recommendations for differentiating PMR from other entities mimicking PMR.
- Provide recommendations for ordering appropriate test to differentiate PMR from other conditions.
- Provide recommendations for employing appropriate treatment strategies for PMR

Needs Assessment

Polymyalgia rheumatic (PMR), is the most common chronic inflammatory condition in older adults, particularly among those of northern European ancestry.[1,2] PMR may also occur with another serious condition called giant cell arteritis (GCA), which can be dangerous. PMR can be hard to diagnose. The doctor will ask questions about symptoms and health history and perform a physical examination. Blood tests will be done to check inflammation levels and to rule out conditions that cause symptoms similar to PMR, such as rheumatoid arthritis and lupus.[3]

Practice Gaps

There is currently no definitive test for polymyalgia rheumatica; occasionally, this leads to difficulties in diagnosis.[1] To complicate matters, approximately 10% of patients presenting with PMR have a delayed diagnosis due to similarities in initial clinical presentation with late onset rheumatoid arthritis (LORA), rhabdomyolysis, myalgias, and temporal arteritis (TA) patients presenting with polymyalgic symptoms (PMS).[4,5] Patients with atypical presentations make it more challenging to establish a diagnosis.[6-9] For example, patients aged 40 to 50 years, asymmetric symptoms, and patients with an erythrocyte sedimentation rate (ESR) less than 40 mm/h. To make matters even more challenging, patients will frequently attribute symptoms of PMR to age/normal wear and tear of the body; thereby putting them at risk of serious

complications such as giant cell arteritis, which untreated can lead to blindness.[10] Treatment can also be a challenge. Disease relapses are common, and treatment with glucocorticoids is associated with substantial morbidity.[11] Additionally, PMR and GCA patients are frequently non-adherent to prescribed calcium and vitamin D supplements, thereby increasing their risk for glucocorticoid-induced osteoporosis (GIO).[12]

Physicians may improve their care of patients with PMR by engaging in continuing medical education that provides practical integration of current evidence-based guidelines and recommendations into their standards of care, including, but not limited to the following:[1,13]

- Diagnosis of PMR should start with evaluation of core inclusion and exclusion criteria.
- Straightforward polymyalgia rheumatica should be treated with low-dose corticosteroids and a slow taper.
- Prednisone in a starting dosage of 15 mg per day is the consensus recommendation.
- Medications should be instituted to decrease fracture risk in patients on high-dose, long-term glucocorticoid therapy.
- Alendronate (Fosamax) and risedronate (Actonel) have been shown to increase bone mineral density and decrease vertebral fractures in patients on long-term glucocorticoid therapy.
- Low-dose aspirin should be used as an adjunctive treatment to decrease the risk of ischemic events in patients with giant cell arteritis.

These recommendations are provided only as assistance for physicians making clinical decisions regarding the care of their patients. As such, they cannot substitute for the individual judgment brought to each clinical situation by the patient's family physician. As with all clinical reference resources, they reflect the best understanding of the science of medicine at the time of publication, but they should be used with the clear understanding that continued research may result in new knowledge and recommendations. These recommendations are only one element in the complex process of improving the health of America. To be effective, the recommendations must be implemented. As such, physicians require continuing medical education to assist them with making decisions about specific clinical considerations.

Resources: Evidence-Based Practice Recommendations/Guidelines/Performance Measures

- Recognition and management of polymyalgia rheumatica and giant cell arteritis[1]
- BSR and BHPR guidelines for the management of polymyalgia rheumatica[13]
- Familydoctor.org – Giant Cell Arteritis and Polymyalgia Rheumatica (patient education)[14]

References

1. Caylor TL, Perkins A. Recognition and management of polymyalgia rheumatica and giant cell arteritis. *American family physician.* 2013;88(10):676-684.

2. Michet CJ, Matteson EL. Polymyalgia rheumatica. *BMJ : British Medical Journal.* 2008;336(7647):765-769.
3. Arthritis Foundation. Polymyalgia Rheumatica. 2017;
4. Dalkilic E, Tufan AN, Hafizoglu E, et al. The process from symptom onset to rheumatology clinic in polymyalgia rheumatica. *Rheumatology international.* 2014;34(11):1589-1592.
5. Pease CT, Haugeberg G, Morgan AW, Montague B, Hensor EM, Bhakta BB. Diagnosing late onset rheumatoid arthritis, polymyalgia rheumatica, and temporal arteritis in patients presenting with polymyalgic symptoms. A prospective longterm evaluation. *The Journal of rheumatology.* 2005;32(6):1043-1046.
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7. Gonzalez-Gay MA, Rodriguez-Valverde V, Blanco R, et al. Polymyalgia rheumatica without significantly increased erythrocyte sedimentation rate. A more benign syndrome. *Archives of internal medicine.* 1997;157(3):317-320.
8. Helfgott SM, Kieval RI. Polymyalgia rheumatica in patients with a normal erythrocyte sedimentation rate. *Arthritis and rheumatism.* 1996;39(2):304-307.
9. Proven A, Gabriel SE, O'Fallon WM, Hunder GG. Polymyalgia rheumatica with low erythrocyte sedimentation rate at diagnosis. *The Journal of rheumatology.* 1999;26(6):1333-1337.
10. Tshimologo M, Saunders B, Muller S, Mallen CD, Hider SL. Patients' views on the causes of their polymyalgia rheumatica: a content analysis of data from the PMR Cohort Study. *BMJ open.* 2017;7(1):e014301.
11. Kermani TA, Warrington KJ. Polymyalgia rheumatica. *The Lancet.* 2013;381(9860):63-72.
12. Emamifar A, Gildberg-Mortensen R, Andreas Just S, Lomborg N, Asmussen Andreasen R, Jensen Hansen IM. Level of Adherence to Prophylactic Osteoporosis Medication amongst Patients with Polymyalgia Rheumatica and Giant Cell Arteritis: A Cross-Sectional Study. *International journal of rheumatology.* 2015;2015:783709.
13. Dasgupta B, Borg FA, Hassan N, et al. BSR and BHPR guidelines for the management of polymyalgia rheumatica. *Rheumatology.* 2010;49(1):186-190.
14. FamilyDoctor.org. Giant Cell Arteritis and Polymyalgia Rheumatica. 2014;

