



UCSD Rheumatology Fellows and Residents at
the ACR/ARHP Annual Meeting
San Diego, 2017



Monday 6 1070 2043

Adherence to American College of Rheumatology Guidelines for Prevention of Glucocorticoid-Induced Osteoporosis in Patients with Polymyalgia Rheumatica

Brittany Frankel, MD, Angela Christensen, MD, Monica Guma, MD, PhD
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Background	Calcium and Vitamin D	Conclusion															
<ul style="list-style-type: none"> 2010 ACR guidelines recommend for any patients initiating glucocorticoid therapy with anticipated duration ≥3 months Baseline bone mineral density (BMD) assessment Counseling on calcium and vitamin D intake Assessment of osteoporosis risk factors Counseling on lifestyle modification Prior studies suggest implementation of glucocorticoid-induced osteoporosis (GIOP) prevention measures is often suboptimal In some populations, less than one third received BMD testing or had documented calcium and vitamin D supplementation PMR is a common condition in older adults for which most patients receive >3 months of prednisone As such, PMR population utilized to investigate implementation of GIOP prevention measures within our rheumatology clinics 	<table border="1"> <thead> <tr> <th></th> <th>% Patients</th> <th># Patients</th> </tr> </thead> <tbody> <tr> <td>Calcium counseling or supplementation</td> <td>42 %</td> <td>23</td> </tr> <tr> <td>Vitamin D supplementation</td> <td>55 %</td> <td>30</td> </tr> <tr> <td>Vitamin D level checked within 1 year of diagnosis</td> <td>35 %</td> <td>19</td> </tr> <tr> <td>Normal vitamin D level and/or vitamin D supplementation</td> <td>62 %</td> <td>35</td> </tr> </tbody> </table>		% Patients	# Patients	Calcium counseling or supplementation	42 %	23	Vitamin D supplementation	55 %	30	Vitamin D level checked within 1 year of diagnosis	35 %	19	Normal vitamin D level and/or vitamin D supplementation	62 %	35	<ul style="list-style-type: none"> Rates of implementation of GIOP prevention measures among patients with PMR are suboptimal in our healthcare system Though it was indicated in 100% of patients, only 29% of patients received a baseline DXA scan 43% of patients had documentation of either calcium supplementation or counseling on calcium intake 62% of patients had a normal vitamin D level, were counseled on vitamin D, and/or were taking vitamin D supplementation Although prophylactic bisphosphonate therapy was indicated in 96% of patients, only one patient received bisphosphonate therapy within 6 months after corticosteroid initiation
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Methods	Baseline DXA Ordering Patterns	Discussion															
<ul style="list-style-type: none"> EHR search to identify patients with diagnosis of PMR on problem list and at least 2 rheumatology clinic encounters Retrospective, 170 patient charts reviewed directly 55 patients met inclusion criteria New diagnosis of PMR at time of rheumatology clinic visit PMR diagnosed no earlier than November 2010 Absence of osteoporosis at the time of PMR diagnosis 	<p>Figure 1: 41% of patients were noted to either be taking calcium supplementation or had a documented measurement about calcium intake by a rheumatology provider. 55% of patients were either taking or were offered vitamin D supplementation. In 35% of patients, a vitamin D level was checked between 1 year before and 1 year after diagnosis. 62% of patients either had a normal vitamin D level, were taking and/or offered vitamin D supplementation.</p> <p>Figure 2: Percentage of patients (of a total 55) who received a DXA scan within above indicated time frames. Because rate of bone loss has been shown to peak 6 months into glucocorticoid therapy, we defined a "baseline DXA" as being one obtained between 3 years before and 6 months after PMR diagnosis.</p>	<ul style="list-style-type: none"> Which provider should be responsible for osteoporosis prevention in patients on chronic glucocorticoids? At our institution, osteoporosis is predominantly managed by primary care and endocrinology departments In PMR, the goal is often to taper to low doses of steroids quickly. Benefit of osteoporosis prevention measures less clear at lower doses of steroids. 															
Patient Characteristics	Bisphosphonates	Future Directions															
<ul style="list-style-type: none"> Mean age: 69.5 years 55% male 76% Caucasian 91% non-smokers Mean BMI: 26.9 16% with baseline osteoporosis on DXA 9% with concurrent giant cell arteritis 64% had a primary care provider within our healthcare system 	<ul style="list-style-type: none"> Bisphosphonate therapy was indicated in 96% of patients (53/55) per 2010 ACR guidelines Bisphosphonate therapy was offered to 19% of these patients (10/53) 15% (8/53) were treated with a bisphosphonate A rheumatologist within our healthcare system initiated or offered a bisphosphonate to 3 patients (6% of patients who had an indication) Only one patient was treated with or offered a bisphosphonate within 6 months of corticosteroid initiation 	<ul style="list-style-type: none"> Epic dot phrase: Remind providers to order DXA and counsel on osteoporosis risk factors and prevention measures Smart Epic pop-up: If prednisone is ordered for >3 months for a patient who does not have a baseline DXA on file, Epic would prompt the ordering provider to order a DXA. Pop-up could also include a reminder to consider vitamin D supplementation, calcium intake counseling Perform similar retrospective analysis on different patient populations (e.g. vasculitis) Conduct future study to assess adherence to 2017 guidelines 															
Prednisone Prescribing Patterns	References																
<ul style="list-style-type: none"> Median initial prednisone dose: 20mg/day Median prednisone duration: 20 months (range 4 to 75 months) 100% were prescribed ≥3 months of ≥5mg prednisone 83% were prescribed ≥3 months of ≥7.5mg prednisone 81% remained on prednisone at 1 year Mean prednisone dose at 1 year: 7.4mg Median prednisone dose at 1 year: 5mg (range 1mg to 25mg) Among those on steroids at 1 year: <ul style="list-style-type: none"> 49% were offered steroid sparing treatment 43% were started on steroid sparing treatment 	<p>1. American College of Rheumatology. Guidelines for the Management of Polymyalgia Rheumatica and Temporal Arteritis. Arthritis Care Res (Oxford) 2010; 22(12): 2233-2241.</p> <p>2. American College of Rheumatology. Guidelines for the Management of Osteoporosis. Arthritis Care Res (Oxford) 2010; 22(12): 2233-2241.</p> <p>3. American College of Rheumatology. Guidelines for the Management of Osteoporosis. Arthritis Care Res (Oxford) 2010; 22(12): 2233-2241.</p>																



ACR 2017 Poster presentation

Brittany Frankel, MD, recent UCSD residency graduate together with Angela Christensen, MD, recent UCSD Fellowship graduate (not in the picture...)

Adherence to American College of Rheumatology guidelines for prevention of glucocorticoid-induced osteoporosis in patients with polymyalgia rheumatica



B - Monday 1142 C - Tuesday 2115

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A Case Control Study Of Anakinra Use For Acute Gout in a VA Patient Cohort Reveals Association with East Asian Descent, High Urate Burden, and Increased Co-Morbidities and All-Cause Mortality

Sharma E, Terkeltaub R.

ABSTRACT

INTRODUCTION

METHODS

RESULTS

CONCLUSIONS

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Ena Sharma MD, Senior Fellow La Jolla VA Medical Center RC

ACR 2017 Poster presentation

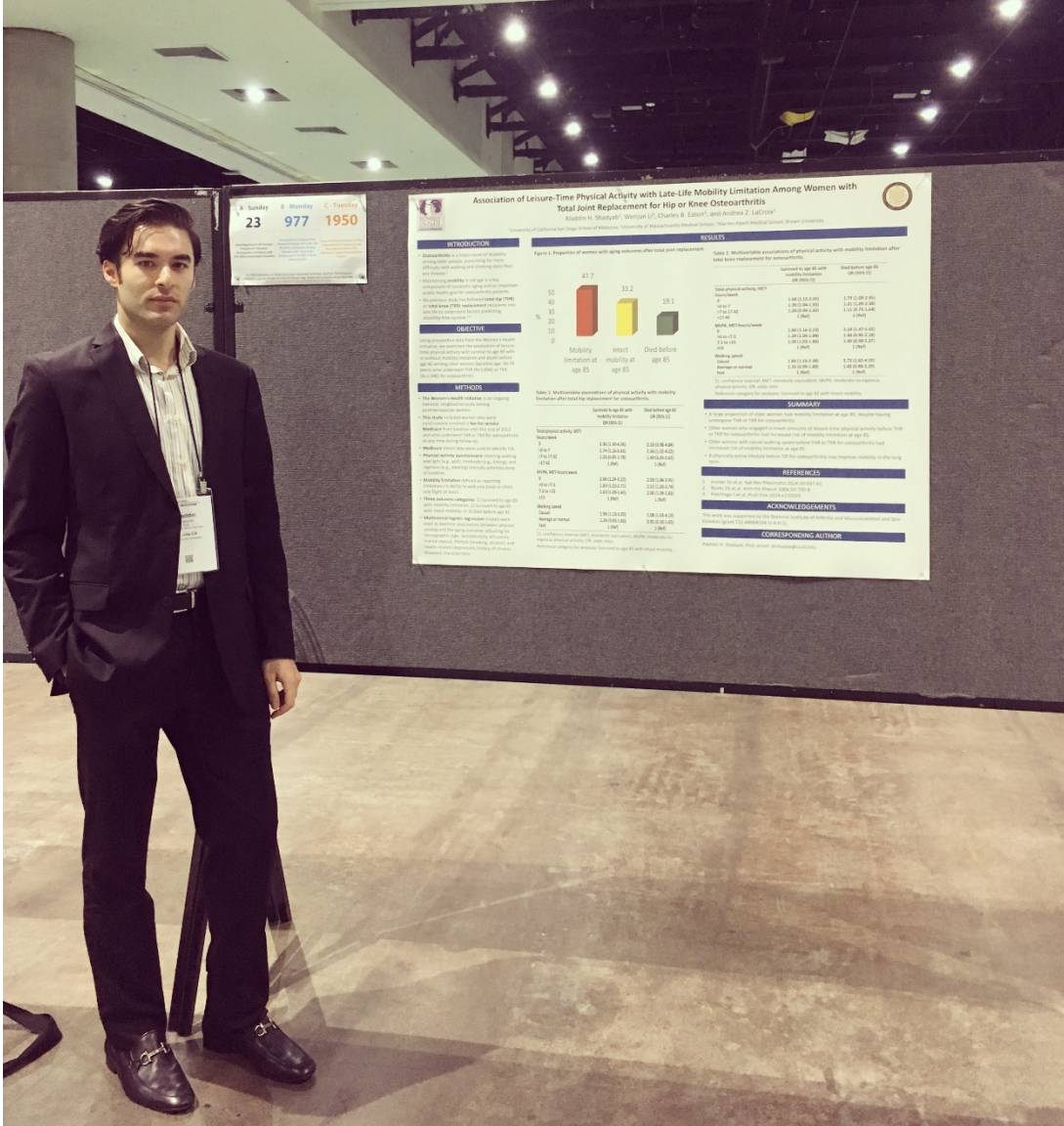
Ena Sharma, MD, Senior Fellow (2nd yr)

A case control study of Anakinra use for acute gout in a VA patient cohort reveals association with east Asian descent, high urate burden, and increased co-morbidities, and all-cause mortality



Chelsey Smith, MD, Senior Fellow (3rd year, research path)

ACR 2017 Presenter for Clinicopathologic Conference (CPC) session: “Fever and Cytopenia in a Lupus Patient: Nothing is as simple as it seems (Nov 6, 2017)”



Association of Leisure-Time Physical Activity with Late-Life Mobility Limitation Among Women with Total Joint Replacement for Hip or Knee Osteoarthritis
 Aladdin H. Shadyab¹, Wanyun Li¹, Charles S. Eaton², and Andrew G. Lusk³
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INTRODUCTION
 Osteoarthritis (OA) is a common cause of disability, and total joint replacement (TJR) is a common treatment. However, the long-term impact of TJR on mobility is unclear. We examined the association of leisure-time physical activity (LTPA) with late-life mobility limitation among women with TJR for hip or knee OA.

OBJECTIVE
 To examine the association of LTPA with late-life mobility limitation among women with TJR for hip or knee OA.

METHODS
 We used data from the Osteoarthritis Initiative (OI), a population-based cohort study of OA. We included women with TJR for hip or knee OA who had data on LTPA and mobility limitation. We used logistic regression to estimate the odds ratio (OR) of late-life mobility limitation among women with TJR for hip or knee OA who were physically active compared to those who were sedentary.

RESULTS
 Among 1,000 women with TJR for hip or knee OA, 33.2% were physically active at baseline. The OR of late-life mobility limitation among women with TJR for hip or knee OA who were physically active compared to those who were sedentary was 0.71 (95% CI: 0.55, 0.92).

CONCLUSIONS
 Physical activity was associated with a lower risk of late-life mobility limitation among women with TJR for hip or knee OA.

REFERENCES
 1. Shadyab AH, Li W, Eaton CS, Lusk AG. Association of Leisure-Time Physical Activity with Late-Life Mobility Limitation Among Women with Total Joint Replacement for Hip or Knee Osteoarthritis. *Journal of the American Medical Association*. 2017;317(12):1453-1461.

ACR 2017 Poster and Oral presentation

Aladdin Shadyab, PhD, postdoctoral Fellow

Poster Presentation: Association of leisure-time physical activity with late-life mobility limitation among women with total joint replacement for hip or knee osteoarthritis

Oral Presentation: General and abdominal obesity as risk factors for late-life mobility limitation among women with total knee or hip replacement for osteoarthritis