with gout in normal and overweight categories were had higher risk vs. controls with FRS-CHD score of 8.86 ± 8.05 vs. 6.53 ± 6.41 ($p=0.03$) and 9.37 ± 7.72 vs. 7.89 ± 5.58 ($p=0.01$), respectively. No differences for 2013 ACC/AHA in global and BMI-stratified comparisons. Proportion of high-risk subjects were similar in both groups regardless of BMI category: for FRS-CHD 7.5 vs 4.7% ($p=0.06$) and 2013 ACC/AHA with 21.5 vs. 17.8% ($p=0.14$).

Conclusion: Normal BMI or overweight Mexican patients with gout may be at higher 10-year estimated cardiovascular risk compared to matched age, gender and BMI healthy controls. Obese gout subjects are at high risk with non-statistical significance scores for FRS-CHD or 2013 ACC/AHA compared to controls.

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POS1150

ANATOMICAL LOCATIONS AND CORRELATES OF CALCIUM PYROPHOSPHATE CRYSTAL DEPOSITS OF THE SPINE – PATHOLOGIC EXAMINATION OF 77 SURGICAL CASES

J. Dau¹, G. Ho², H. Choi¹, J. Schwab³, M. Kohler¹. ¹Massachusetts General Hospital, Division of Rheumatology, Allergy, and Immunology, Boston, United States of America; ²New York University Langone Health, Division of Rheumatology, New York City, United States of America; ³Massachusetts General Hospital, Department of Orthopaedic Surgery, Boston, United States of America

Background: Spinal involvement in calcium pyrophosphate deposition disease (CPPD) is thought to be a rare occurrence and is seen infrequently as crowned dens syndrome. Furthermore, data on anatomical locations and correlates of calcium pyrophosphate (CPP) deposits in spinal CPPD are scarce.

Objectives: To describe the anatomical locations and correlates of pathologically confirmed CPPD of the spine.

Methods: Consecutive patients with spinal CPPD were identified via retrospective chart review of individuals who underwent spine surgery for intractable chronic neck or back pain at Massachusetts General Hospital between 2009 and 2014. These deposits and surrounding anatomical structures were surgically resected and confirmed to have calcium pyrophosphate deposition upon pathologic review. We reviewed musculoskeletal imaging (CT, MRI, XR) and laboratory data from these pathologically confirmed cases.

Results: From April 2009 to August 2014, we identified 77 individuals with pathologically confirmed CPPD of the spine. The mean age was 68 years; 41 (53%) were female; mean BMI was 28.7. Calcium pyrophosphate (CPP) was grossly identified intraoperatively by the surgeon in 38 cases (50%), typically as “chalky white deposits” (Figure 1). CPP deposits were seen most frequently in the ligamentum flavum (23%) and intervertebral disc (23%), followed by other less common locations (Table 1). Imaging findings in the soft tissue or intervertebral disc suggestive of CPPD were found in 5 cases (6%), whereas findings of spinal canal narrowing, facet arthropathy, or ligamentum flavum thickening were eventually correlative with CPP deposits in pathologic specimens. Only 7 (9%) experienced a prior episode of acute CPP arthritis (pseudogout). Chondrocalcinosis on x-ray was seen in 26 cases (34%), most commonly in the wrist and/or knees. Osteoarthritis was present in all spinal imaging, and 65% had comorbid scoliosis. Laboratory abnormalities associated with secondary causes of CPPD (hypercalcemia, hypomagnesemia, hyperparathyroidism) were not seen with spinal CPPD.

Conclusion: Spinal CPPD may occur more frequently than previously perceived. The ligamentum flavum and intervertebral discs were common anatomical locations for spinal CPPD. Advanced imaging of the spine showed low sensitivity for detecting spinal CPPD. Only a small minority had typical peripheral joint involvement or imaging with peripheral joint chondrocalcinosis. Thus, without pathologic confirmation, the vast majority of cases would remain unidentified. These findings call for the need to seek pathologic confirmation to determine the robust epidemiology and also raise the potential role for pre-operative CPPD treatment.

Table 1. Spinal Anatomic Locations of Pathologically Confirmed CPPD

Spinal Anatomic Location	No. of Sites (%) [*]
ligamentum flavum	29 (23)
Intervertebral Disc	28 (23)
Other Location	19 (15)
Posterior Elements	18 (15)
Facet	14 (11)
Synovium	8 (6)
Interspinous Ligament	3 (2)
Subarticular/Lateral Recess	2 (2)
Fibrocartilaginous Tissue	1 (1)
Inner Spine	1 (1)
Other Ligament	1 (1)

^{*}Some patients had more than one anatomic location where CPP was isolated

Figure 1. Gross visualization of calcium pyrophosphate deposition (black arrow)

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Infection-related rheumatic diseases

POS1151

IMMUNOGENICITY AND SAFETY OF 23-VALENT PNEUMOCOCCAL POLYSACCHARIDE VACCINE IN PATIENTS WITH SPONDYLOARTHRITIS.

N. Muravyeva¹, B. Belov¹, M. Baranova¹, M. Cherkasova². ¹V.A. Nasonova Research Institute of Rheumatology, Laboratory for Studying Comorbid Infections and Monitoring the Safety of Drug Therapy, Moscow, Russian Federation; ²V.A. Nasonova Research Institute of Rheumatology, Laboratory of Immunology and Molecular Biology of Rheumatic Diseases, Moscow, Russian Federation

Background: Currently, for the treatment of patients with spondyloarthritis (SpA), basic anti-inflammatory drugs and biological drugs are widely used to effectively control the activity of the disease. At the same time, the use of these drugs is associated with an increased risk of developing infections, some of which can be prevented by vaccination.

Objectives: The aim of the study was to evaluate the immunogenicity and safety of the 23-valent pneumococcal polysaccharide vaccine (PPV-23) in patients with SpA.

Methods: The study included 42 patients with SpA: 30 men, 12 women, age 22-60 years, disease duration 14.8 ± 10.6 years. Ankylosing spondylitis was diagnosed in 30 patients, psoriatic spondyloarthritis – in 12 patients. Activity of diseases was assessed as high in 78% of patients (median BASDAI index was 5.3 [4.1; 6.8]). At the time of inclusion in the study, all patients received nonsteroidal anti-inflammatory drugs, 14 patients - methotrexate, 10 - sulfasalazine, 6 - glucocorticoids, 2 - leflunomide, 2 - etanercept, 2 - secukinumab. 15 patients were planned to be prescribed secukinumab, 3 – etanercept, 3 - adalimumab, 1 – golimumab. 7 patients had a history of more than 2 cases of lower respiratory tract infections, 2 patients reported a monthly exacerbation of chronic sinusitis, 1 patient – the development of otitis every 2-3 months, requiring the use of antibacterial drugs. PPV-23 was administered in the amount of 1 dose (0.5ml) subcutaneously into the deltoid muscle against the background of anti-rheumatic therapy.