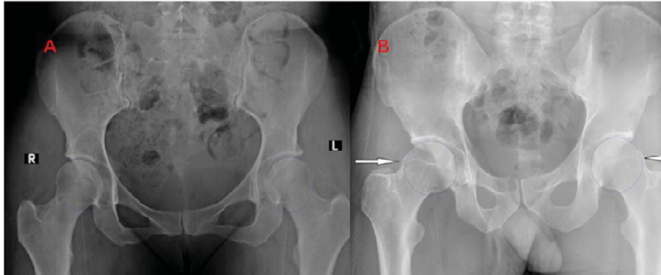


years in axSpA patients. Radiographic findings of cam abnormality (figure) were significantly more frequent in axSpA patients in comparison with control subjects (30/150 [20%] vs 17/193 [9%] and  $P=0.004$ ). Cam-type radiographic abnormality was only present 2 female control subjects and none of female axSpA patients. FAI was significantly correlated with the presence of HLA-B27 ( $r=0.213$  and  $P=0.048$ ), smoking ( $r=0.194$  and  $P=0.018$ ), height ( $r=0.283$  and  $P=0.001$ ) and gender ( $r=0.443$  and  $P<0.001$ ).



**Conclusions:** Our results showed that radiographic findings compatible with PGD were frequent in axSpA patients. In addition to repetitive injury to the proximal femoral physis, new bone formation may be responsible for increased FAI in axSpA. In axSpA patients with hip or trochanteric pain, FAI may be kept in mind as an alternative explanation of the symptoms.

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#### FRI0463 OPTIMIZING THE ASSESSMENT OF SPONDYLOARTHROPATHY AMONG OPHTHALMOLOGISTS – A REGIONAL SURVEY

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**Background:** Spondyloarthropathy (SpA), is an under diagnosed clinical condition with an average delay in diagnosis of upto 8 years. The delay occurs due to non-specific symptoms which occur in young patients who are unlikely to present to healthcare services as well as presentations to different specialties as a result of extra-articular manifestations.

30% of Ankylosing Spondylitis (AS) patients have acute anterior uveitis (AAU) at some point due to the common link with HLA B-27. Uveitis may precede the diagnosis of Ankylosing Spondylitis (AS) by several years. Previous studies have shown that up to 40% (1) people with AAU have undiagnosed SpA, and are not routinely seen in rheumatology services due to lack of symptom and risk recognition. Early diagnosis in this group is essential to reduce the delay in diagnosis and improve the outcome of SpA.

**Objectives:** 1. To identify the current assessment of inflammatory back pain, in patients with recurrent AAU, by local ophthalmologists. 2. To identify ways to improve cross specialty referral and reduce delay in the diagnosis of SpA.

**Methods:** This is a prospective, questionnaire based semi qualitative study. The target population includes specialist ophthalmology trainees, consultants and GPs with a special interest in ophthalmology across the East Midlands. The questionnaire was piloted locally at a regional uveitis meeting. The improved questionnaire was then electronically communicated to ophthalmologists across East Midlands. The data was collated and analyzed using smartsurvey software.

**Results:** We received 61 responses (response rate =51%), of which 57 (n=57) were analysed. The respondents largely comprised doctors working at university hospitals (74%) and consultants (45%)

17% of the respondents were not confident with taking an inflammatory back pain history. Of the remaining 83%, only 67% respondents would normally think to ask about the main symptoms of back pain related to AS. Thus 44% respondents were not competent in taking an inflammatory back pain history.

With regards to their clinical practice, only 54% of respondents would routinely ask about symptoms of SpA in patients with recurrent AAU, even though 79% would test for HLA-B27. Furthermore, according to 42% of respondents they would never refer a recurrent AAU patient to a rheumatologist.

Most respondents felt that work pressure was the most likely reason for deficit of proper SpA assessment and referrals, followed by lack of support by guidelines

**Conclusions:** Our survey demonstrates a clear knowledge deficit among ophthalmologists regarding inflammatory back pain and the importance of assessing it in recurrent AAU patients. This can be improved by educating ophthalmologists about SpA in conferences and developing local guidelines about patients with HLA B-27 recurrent AAU related to assessment and referral.

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**Acknowledgements:** Respondents.

**Disclosure of Interest:** None declared

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#### FRI0464 ARTERIAL WALL INFLAMMATION IS NOT AFFECTED BY ANTI-IL17 TREATMENT IN PATIENTS WITH PERIPHERAL SPONDYLOARTHROPATHY

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**Background:** Patients with spondyloarthritis (SpA), a chronic inflammatory disease, have an increased cardiovascular risk, which is partly due to increased inflammatory activity in the arterial wall.

IL-17A blockade with secukinumab is an effective treatment for SpA. The role of IL-17A in atherogenesis is controversial, some studies suggest that IL-17A is pro-atherogenic, while others indicate that IL-17A is athero-protective. So, it is not known what the effect is of treatment with IL-17A blockade on inflammatory activity in the arterial wall.

**Objectives:** To assess the effect of 3 months treatment with secukinumab on arterial wall inflammation in SpA patients with peripheral disease (pSpA).

**Methods:** We included 20 patients with clinical pSpA in a 12 week open-label trial. Treatment consisted of 300 mg secukinumab once a week during the first 4 weeks and then every 4 weeks thereafter. EULAR DAS response was used to define a responder/non responder state. To measure arterial wall inflammation we performed a 18-fluorodeoxyglucose positron emission tomography with computed tomography (<sup>18</sup>F-FDG PET/CT) imaging in 18 patients at baseline and week 12, which is a validated method to quantify arterial wall inflammation. Arterial wall inflammation is measured in both the ascending aorta and carotids, maximal FDG uptake is shown as the maximal target-to-background ratio (TBR<sub>max</sub>).

**Results:** 18 patients with pSpA (age 44±12, 72% male) and without a previous cardiovascular event underwent imaging. Overall, three months treatment with secukinumab resulted in a significant improvement of disease activity with 17/18 patients achieving a EULAR DAS response (9 good and 8 moderate responders). Correspondingly, CRP levels decreased significantly (baseline: 3.2 [1.2–12.40] mg/dl vs. wk 12: 2.0 [1.1–5.8] mg/dl,  $p=0.011$ ). Importantly, treatment with secukinumab did not affect cholesterol levels (total cholesterol baseline: 5.1±1 mmol/l v.s wk 12: 5.5±1 mmol/l,  $p=0.167$ ; LDL-c baseline: 3.2±0.8 mmol/l v.s wk 12: 3.5±0.9 mmol/l,  $p=0.219$ ). Additionally, arterial wall inflammation as measured by PET-CT did not change over the course of the 12 weeks treatment with secukinumab (aorta TBR<sub>max</sub> baseline: 3.3±0.9 vs. wk 12: 3.3±0.7,  $p=0.861$ ; carotid TBR<sub>max</sub> baseline: 1.88±0.6 vs. wk 12: 1.76±0.4,  $p=0.067$ ).

**Conclusions:** This pilot study in 18 patients with pSpA without any preexisting CV events showed that treatment with secukinumab for 3 months has no effect on arterial wall inflammation as measured by PET-CT. Further research in larger patient groups, over a longer period of treatment, and with different measurements remains warranted to fully elucidate the effect of IL-17A blockade on vascular inflammation.

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#### FRI0465 ANGLES OF SACRUM INCLINATION EFFECT ON RADIOLOGIC IMAGING READING IN SPONDYLOARTHROPATHY (THE ANTELOPE-DESIR STUDY)

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**Objectives:** To assess the impact of spinal angles on clinical and imaging features of suspicion of axial spondyloarthritis (axSpA).

**Methods:** The DESIR cohort is a prospective longitudinal cohort study of adults aged 18–50 with inflammatory back pain (IBP) ≥3 months, ≤3 years. Baseline lateral lumbar radiography of patients included in DESIR cohort were read by two central blinded fellow readers (and a rheumatologist spine specialist in case of discrepancy) for Sacral Horizontal Angle (SHA), Lumbosacral angle (LSA) and total Lordotic Angle (TLA) measures. On the basis of literature, patients were classified depending on whether they had TLA more or less than 50°, SHA more or less than 40° or LSA more or less than 15°. Associations between angles and baseline clinical variables, presence of X-Rays (New York) and MRI (ASAS and MORPHO proposal definition) sacroiliitis, presence of spinal signs of spondyloarthritis (mSASSS, BASRI-total, SPARCC scores), presence