with CHIKV IgM positive. In the EQ-5D (Figure 1), between 72% and 92% of patients didn't report problems on the mobility, self-care, usual activities, anxiety and depression dimensions. In contrast pain and discomfort dimensions were affected from moderate to extreme (44.7% and 8.6%). There weren't significant differences between true positives, true false, false negative within all the variables, except on the anxiety and depression dimensions where the false positives had a higher significant score in comparison to the other groups (n: 10, 38.5%; p=0.00; OR:4.17, IC:1.8-9.57). In the EQ-5D-VAS, media for VAS was 75.56 (SD±21.18) where the highest scores of VAS were found on the false negatives. In pain VAS, false positives as well as the duration greater than 7 weeks where associated with several pain (n: 10, 2.9%; OR: 0.2; IC 1.25–6.33 y n: 27, 21.3%; p=0.018; OR 2.02, IC: 1.12–3.66 respectively).

Conclusion: In general, the disability of CHIKV infected patients was mild to moderate, finding the most affected dimensions to be pain, discomfort, anxiety and depression. The false positives and the population with anxiety and depression are related with higher score of disability.

Figure 1. EuroQol-5D in patients with CHIKV infection from the Colombian COPCORD cohort.

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SAT0459

DIAGNOSIS AND MANAGEMENT OF ACUTE HOT JOINTS AT A TERTIARY RHEUMATOLOGY CENTRE OVER A 7-MONTH PERIOD

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Background: The acute hot joint presentation is common in clinical practice, often due to crystal arthritis or non-inflammatory conditions. The most serious diagnosis is septic arthritis (SA), which can destroy cartilage within days, and therefore must be promptly diagnosed or excluded. The mortality rate for SA is 7-15%, despite antibiotic use [1]. Crystal arthropathies and SA are difficult to distinguish clinically, requiring arthrocentesis and synovial fluid (SF) analysis, in keeping with national guidelines.

Objectives: 1. Quantify number of acute hot joint presentations to our hospital over 7 months, including incidence of SA and crystal arthropathy. 2. Determine clinical features and outcomes (including morbidity/mortality) in SA.

3. Compare clinician diagnosis with laboratory diagnosis (gold-standard diagnostic test; crystal microscopy and culture).

4. Determine the correlation between WCC and crystal arthropathy or SA. **Methods:** We retrospectively analysed laboratory diagnostic data and electronic clinical records, for patients presenting to a tertiary rheumatology centre in Northwest England with an acute hot joint, February-August 2018. For crystal arthropathy and SA, sensitivity, specificity, likelihood ratios, and accuracy of diagnosis were calculated for clinician diagnosis when compared to laboratory diagnosis, using the statistical software 'R'. WCCs were used to create receiver operating curves (ROCs), with area under the curve and predicted diagnostic threshold for SA and crystal arthropathy. In cases of SA, organism, serum inflammatory markers, and outcomes were recorded.

Results: 137 patients were included. The most common site of arthrocentesis was the knee (n=108). There were 53 clinician-confirmed cases of crystal arthropathy. Compared to laboratory crystal microscopy, this yielded a sensitivity of 91.7%, specificity 80.2%, diagnostic accuracy 83.2%. There were 10 cases of native joint SA (plus 2 prosthetic and 1

case of osteomyelitis). SF cultures were positive in 80% of cases, all of which grew *Staphylococcus aureus*. 50% had commenced antimicrobials prior to arthrocentesis. 8 cases were treated successfully (5 prolonged admission due to underlying rheumatological disease); the 2 culture-negative cases had significant morbidity, with persistent symptoms. For SA, mean serum C-reactive protein at presentation was 152; serum WCC was 12. Clinician diagnosis, compared to culture results, yielded a sensitivity of 100%, specificity 98.4%, diagnostic accuracy 98.5%. Figure 1 shows mean SF WCC by diagnosis; highest value was SA (WCC=136293). ROC analysis of WCC yielded potential diagnostic threshold of 36450 for SA (AUC=0.7) and 10000 for crystal arthropathy (AUC=0.7) in our cohort.

Conclusion: The acute hot joint continues to be a common presentation in the acute medical setting. SA has considerable morbidity associated with it, especially in the presence of co-existing rheumatological disease. Our results confirm the importance of prompt arthrocentesis, prior to commencement of antimicrobials. SF WCC may also be utilised as a rapid diagnostic marker, especially differentiating between inflammatory and non-inflammatory causes of a hot joint, when taken with clinical assessment.

REFERENCES

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Figure 1

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SAT0460

HCV-RELATED MIXED CRYOGLOBULINAEMIA IN THE DIRECT-ANTIVIRAL AGENTS ERA: IS THERE ADVANTAGE IN SEQUENTIAL THERAPY WITH RITUXIMAB?

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Background: Mixed Cryoglobulinaemia(MC) is a small vessel vasculitis characterized by the presence of a monoclonal rheumatoid factor(RF) and polyclonal immunoglobulins that precipitate at cold temperature, with a large spectrum of clinical manifestations. MC is strongly associated with hepatitis C(HCV) infection>90%. The new direct-acting antivirals(DAA) against HCV, which can eradicate the virus in >95% of patients, are supposed to have benefits on clinical manifestations of MC, nonetheless the amount of data is still limited. Patients with severe vasculitis may require anti-CD20 agent Rituximab(RTX) over DAA. However, despite the strong rationale, the advantage of dual therapy is still debated and the optimal therapeutic schedule unknown.

Objectives: To investigate the impact of DAA treatment on clinical manifestations and biochemical parameters of disease activity in HCV-related MC patients who reached complete viral eradication, and if pre-treatment with RTX was able to define a subset of patients with a different outcome.

Methods: Data was collected from 31 patients with MC, mean age 68 yrs, female 80%, mean disease duration 10 yrs who were treated with