Polymorphonuclear

Pro-calcitonin (0.5

Salford Royal NHS Foundation Trust, Salford, UNITED KINGDOM,

only eight tests differentiating septic from non-septic joints (Table 1).

outcomes and diagnostic thresholds, meta-analysis was possible for

markers and 156 SF markers. Due to heterogeneity of study design,

multiple potential diagnostic thresholds, yielding a total of 27 serum

non-septic joints, was extracted. Most markers had been tested at

8,443 articles were identified, with 54 eligible for inclusion. Information

Results

arthritis. For directly comparable tests (i.e. identical fluid, test and

diagnoses and comparator diagnoses, the following was recorded for

included, without date restriction. In addition to patient demographics,

SF microscopy and culture. English-language articles only were

causes of acute hot native joints, compared with clinical assessment and

/C21

were:

Search strategy included MeSH terms for: causes of a hot or swollen

Scopus and Cochrane Library were searched by two researchers.

We performed a systematic literature review of diagnostic testing for

septic arthritis would reduce unnecessary antibiotics and hospital

(AUC)

Immediate diagnosis/exclusion of septic arthritis in acute hot joints. Medline,

prompt diagnosis of septic arthritis in acute native hot joint presenta-

Background/Aims

Haemophagocytic lymphohistiocytosis (HLH) is a potentially life-threaten-
ting condition characterised by over-activation of the innate immune

Primary HLH is more frequently observed in infants, however, secondary HLH is more

commonly observed in adults. Diagnosis is often delayed, most likely
due to the rarity of the condition and is usually prompted by serological

abnormalities, including hyperferritinemia, organ and bone marrow

dysfunction. Treatment options are limited; however, the Royal Free

Hospital has observed a number of secondary HLH cases who were

successfully treated with steroids and anakinra.

Methods

A retrospective search of clinic letters and patient records was

undertaken using electronic care records. We also searched through

pharmacy records of patients treated with anakinra at the Royal Free

Hospital. Patients with a documented diagnosis of HLH prior to March

2020 who had been referred to Rheumatology were included. We

excluded patients after March 2020 due to patients with COVID-19

having similar overlap of symptoms and biomarkers as those with

HLH. We identified key demographic details, laboratory, pathology

investigations, the course of hospital admission, primary diagnosis and

follow-up data. The diagnosis was confirmed within H-score and bone

marrow biopsy where possible.

Results

We identified nine adult cases with a documented diagnosis of HLH

who had been admitted to the Royal Free Hospital and referred to

Rheumatology. They had all been subsequently followed up in

outpatient clinic. Ages of patients ranged from 19 to 56 with a male to

female ratio of 2:1. The predominant underlying pathology was

adult onset Still’s disease (78%), with the remaining cases being

secondary to HIV (22%). Bone marrow aspirate was performed in all

patients and 78% of patients aspirated had bone marrow appearances

in keeping with HLH. Ferritin levels varied from 532 micrograms/L to

93309 micrograms/L with a median ferritin of 5045.5 micrograms/L. H-

scores were variable with a median score of 171.5 (96–239). All patients

received steroids as part of their treatment. Anakinra ( interleukin-1

receptor antagonist) was delivered intravenously (6/9) or subcuta-

neously (3/9).

Conclusion

We present data from nine cases of HLH treated with anakinra who

survived their admission and have been subsequently followed up in

clinic. We found that the majority of these patients had an underlying

diagnosis of adult onset Still’s disease. Anakinra was used success-

fully as part of their treatment both intravenously as well as

subcutaneously. Further work is needed comparing patients with

good and poor outcomes to establish identifiable prognostic markers

as well as effective treatment strategies.
Disclosure
D. Kurzeja: None. J. Perera: None. K. Pillai: None. S. Amin: None. R. Stratton: None. A. Singh: None.