P248 TUBERCULOSIS IS STILL A MAJOR CONTRIBUTOR TO SERIOUS INFECTION IN JUVENILE SLE

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Background/Aims
Infections are a major cause of morbidity and mortality in juvenile systemic lupus erythematosus (SLE). We assessed the incidence and risk factors for major infections in juvenile SLE.
Methods
We carried out a retrospective review of 175 patients of juvenile SLE (ACR 1997 criteria) with age <18 years visiting the rheumatology clinic at a single centre between 2010 and 2020. Clinical details were retrieved from clinical case records and supplemented with data from the hospital's electronic health records. Major infections (defined as need for hospitalization, prolonged antibacterial therapy >1 week, resulting in disability or death) were recorded. Predictors of infection

and their outcomes were determined using multivariate logistic regression and Kaplan Meier survival analysis.

Results

Among 175 patients (154 were girls) with a mean age of 14.79±3.1 years, there were a total of 52 major infections in 43 patients with an incidence rate of 8.83 per 100 person-years. The respiratory tract (19) was the most commonly involved site followed by skin and soft tissue (10), gastrointestinal tract (6), systemic bacteremia (5), ear nose and throat (4), disseminated infection (3), urinary tract (2), central nervous system (1), joint (1) and dengue shock syndrome (1). Organisms isolated were Mycobacterium tuberculosis (11) which was the most common and predominantly extrapulmonary, followed by enterobacteria (12), Staphylococcus aureus (5), cytomegalovirus (3), Herpes zoster (2), Herpes simplex (1), MRSA (1), and Candida (1).

Gastrointestinal involvement (OR 4.21), major organ involvement (OR 2.5), use of cyclophosphamide (OR 7.63), higher baseline SLEDAI (16[11.5-21] vs 12[8.75-16.25]) and a higher daily dose of prednisolone (16.1±15.1mg vs 6.1±5.8mg) at the time of the infection were predictors of a major infection. On multivariate analysis, only higher daily doses of corticosteroids (OR1.09, 95% CI 1.05-1.14) and gastrointestinal involvement (OR 4.98, 1.05-23.65) were significant predictors.

Major infection-free survival at 1 year and 5 years was 82.5% (95% CI 76.8-88.7) and 72.5% (95% CI 65-80.9) respectively. There were eight deaths with five directly attributable to infection. Overall survival was worse in those who had an episode of major infection.

Conclusion

The risk of major infections in juvenile SLE is significant and associated with higher daily corticosteroid use and gastrointestinal involvement at baseline.

Disclosure

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