POSTERS

P003 QUALITY IMPROVEMENT PROJECT ON RITUXIMAB USE IN RHEUMATOID ARTHRITIS - HOW DO WE IMPROVE QUALITY AND COST EFFECTIVENESS?

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Background/Aims
Rituximab (RTX) is a chimeric monoclonal antibody against CD20, a transmembrane protein on B lymphocyte surfaces. It is now established as an effective treatment for rheumatoid arthritis (RA). The timing of re-treatment is not well defined and varies widely in clinical practice. Our aim was to assess departmental practice on retreatment doses and frequency of RTX in RA patients. We proposed...
retreatment with reduced dose (1gm) as compared to the standard dose (1gm x 2, 2 weeks apart). We envisage this would maintain efficacy and lead to significant cost saving for the CCG and Rheumatology department.

Methods
Data were collected retrospectively over 3 years (2017-2020) on patients who had received at least one re-treatment RTX dose no less than 24 weeks after first course of standard regime. Information was obtained on patient demographics, serology, disease activity scores, previous treatment, concurrent therapy including steroids, frequency and dosing of RTX.

Results
50 patients were included with an average age 66 years (range 32-85). 58% were females, 83% were seropositive and 59% had established erosive disease. Most patients had received prior therapy of non-biologic and biologic DMARDs, methotrexate and anti-TNF being the most used agents in 70% and 52%, respectively. 40% were biologic DMARD naïve mostly due to anti-TNF contraindication. 78% patients were receiving concomitant non-biologic DMARDs, methotrexate being the commonest in 50% patients. 16% were on steroids with dose < to 5mg in 87% of patients. 43% of patients received RTX 6 monthly, 33% 8-9 monthly and 24% > 9 months. 96% of the patients received 1gm infusion x2, 2 weeks apart.

Conclusion
Our data showed most patients were receiving standard retreatment regime (1gm x2 fortnightly) at 6 monthly intervals. Previous studies including SMART (Study of Re-treatment With MabThera), SERENE, IMAGE and MIRROR trials suggested reduced dose of RTX had similar clinical efficacy to the standard dose. We optimised retreatment schedule of RTX from 2g to 1g, thereby reducing infection risk, especially in view of the COVID-19 pandemic and achieving significant cost savings. The cost savings over 3-year cycle of treatment for a DGH is of the order of £236,927.

Disclosure
N. Ahmad: None. J. McNally: None.