

## ASS 2022 – OP 5

### **An Audit on Monitoring of Conventional Disease Modifying Antirheumatic Drugs at the Rheumatology Clinic in District General Hospital Kegalle.**

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#### **Background**

Treatment with Disease Modifying Antirheumatic Drugs (DMARDs) carry a potential risk for toxicity and close monitoring can minimize long term damage. This audit was carried out to determine whether DMARD monitoring is carried out according to recommendations in order to ascertain proper utilization of the limited resources. 2017 BSR and BHPR guidelines for the prescription and monitoring of non-biologic DMARDs were considered as the current recommended guidelines.

#### **Method**

A retrospective audit was carried out on 104 patients on Methotrexate, Leflunamide, Sulfasalazine and Hydroxychloroquine as a single agent or in combination. Patient records were checked retrospectively for the immediate past 6 months to look at the investigations carried out and for any abnormalities detected.

#### **Results**

The age distribution of our cohort was 20 to 80 years (median 58 years), 95 were female, 68 had rheumatoid arthritis, 17 undifferentiated inflammatory arthritis, 11 spondyloarthritis and 8 other conditions including psoriatic arthritis, systemic lupus erythematosus, polymyalgia rheumatica and polymyositis, 64 were on Methotrexate, 42 on Sulfasalazine 29 on Leflunamide and 56 on Hydroxychloroquine either as monotherapy or combination therapy. Of the patients on Methotrexate stable dose (61) adherence to the guidelines for testing for full blood count (FBC) was 28% (17) liver enzymes 42% (26), creatinine 31% (19). Over testing rates for FBC was 46% (26), Liver enzymes 38% (23) and creatinine 11% (7). Under testing for the above as follows respectively 28% (17), 20% (12) , 57% (35). Out of the patients who were under tested for FBC 52%(9) had been given request forms appropriately. Serum albumin was checked only in one patient. Of the patients on stable dose of Leflunamide and or Sulfasalazine as monotherapy or combination therapy without Methotrexate(30) , the compliance with guidelines for monitoring of FBC was 17% (5), liver enzymes 23% (7) and creatinine 26% (8). Over testing rates for the above were 26% (8), 17% (5) and 20% (6) respectively and under testing 57% (17), 60% (18) and 53% (16) respectively. Only 20% (6) out of the patients on Leflunamide had at least one blood pressure recording documented during this period. All patients on escalating doses of DMARDs (9) were tested inadequately. During this period 2 patients were detected to have developed neutropaenia

(<1.5\*10<sup>9</sup>/L ) and 7 patients with transaminitis (>3times upper normal) which had required stopping the offending DMARD/DMARDs.

### **Conclusion**

Monitoring of DMARDs has not been carried out in accordance to the guidelines. A significant proportion of excessive testing has been carried out on patients on Methotrexate. There is a need for education and developing a protocol for the unit for DMARD monitoring in order to utilize the resources effectively.