ABSTRACT

Background: It is well established that patients with rheumatic diseases are at high risk of atherosclerosis and cardiovascular disease. Dyslipidaemia is an important modifiable cardiovascular risk factor and in 2018 the Lipid and Atherosclerosis Society of Southern Africa (LASSA) published guidelines with recommended treatment targets for patients with dyslipidaemia.

Objectives: To evaluate the prevalence of dyslipidaemia in patients with rheumatic diseases from a South African population, and identify the proportion of these patients receiving lipid lowering agents (LLAs). The aim was to determine the number of patients on LLAs reaching the low-density lipoprotein cholesterol (LDL-C) and total cholesterol (TC) targets recommended by LASSA guidelines.

Methods: This was a retrospective cohort study of 200 adult patients attending the Helen Joseph Hospital outpatient rheumatology clinic from 22 August to 12 December 2018. Clinical and laboratory data from patients with a confirmed diagnosis of rheumatic disease(s) and had their lipogram(s) measured since attending the clinic were analysed.

Results: The median age of patients was 54 years (IQR 45-62) with a female predominance of 85.5% (n=171) and the majority 52.5% (n=105) being comprised of black African patients. ***Primary outcomes:*** Of the 200 patients enrolled, 127 (63.5%) met the criteria for dyslipidaemia based on their initial lipograms measured at the clinic but only 59 (46.5%) of these patients were on LLAs. At the time of the audit, 164 (82%) patients were eligible to receive LLAs as recommended by the LASSA guidelines, but only 77 (47.2%) were prescribed LLAs. Of these 77, only 22 (28.6%) met the recommended LDL-C targets for very high risk or high risk groups proposed by LASSA. ***Secondary outcomes:*** There was a high prevalence of cardiovascular risk factors present in 153 (76.5%) of patients – with hypertension being predominant in 132 (86.3%) patients. The majority of patients, 186 (93%), were on disease modifying agents for rheumatic diseases (DMARDs). A low proportion of 23 (11.5%) patients were on corticosteroids.

Conclusion: Despite the high prevalence of dyslipidaemia in patients with rheumatic diseases, the majority of patients did not meet the recommended TC/LDL-C targets suggested

by local guidelines. There is a need to raise awareness amongst healthcare practitioners treating this patient population regarding the pertinent aggressive control of dyslipidaemia. Furthermore, owing to the relationship between inflammation and lipids, rheumatic disease itself should perhaps be considered as an independent cardiovascular risk equivalent to other traditional cardiovascular risk factors.