351

‘Keeping an eye’ on hydroxychloroquine use in the renal clinic

Dr Oscar Swift[1], Dr Miriam Ball[1], Mrs Clare Morlidge[1], Dr Praveen Jeevaratnam[1]
[1]*East And North Hertfordshire NHS Trust, Stevenage, United Kingdom*

Introduction

International guidance recommends all patients with lupus nephritis receive hydroxychloroquine, unless there is a specific contraindication[1]. This is based on the multi-ethnic LUMINA studies which identified a survival benefit with hydroxychloroquine in SLE[2]. Hydroxychloroquine use is also indicated for other rheumatological diseases, many of which are associated with renal impairment and are therefore encountered in the nephrology clinic.

In 2018 the Royal College of Ophthalmologists published guidance on screening for hydroxychloroquine retinopathy to reduce risk of ocular toxicity[3]. All patients planning to receive long term therapy should receive a baseline eye examination within 1 year of starting treatment.

The aims of this quality improvement project (QIP) were:

1. To establish the frequency of hydroxychloroquine use in our renal unit
2. To establish rate of referral to ophthalmology services for ocular toxicity
3. To deliver an intervention to improve referral rates to ophthalmology for patients with lupus nephritis receiving hydroxychloroquine
4. To inform patients of the benefits and potential side effects of hydroxychloroquine

Methods

All patients receiving hydroxychloroquine were extracted from Renal Plus, the electronic database for renal patients in our renal unit. All patients with ‘lupus’ or ‘SLE’ in their problem list were also extracted.

Electronic records of patients receiving hydroxychloroquine were evaluated to establish if they were under ophthalmology review. For any patients with lupus nephritis receiving hydroxychloroquine not under ophthalmology review, an entry was made on Renal Plus prompting the clinician who next saw the patient to refer to ophthalmology. Referral of patients with a rheumatological indication for hydroxychloroquine was beyond the scope of this project (guidance states that responsibility of referral should lie with the initiating prescriber). A patient information leaflet to inform patients of the benefits of hydroxychloroquine use and potential side effects was also developed.

Reassessment of the proportion of patients referred to ophthalmology will be made 4 months after the study intervention.

Results

121 patients taking hydroxychloroquine were identified in our renal unit (which provides services for a catchment population of 1.26 million). 46% (56/121) patients taking hydroxychloroquine had lupus nephritis (see figure 1). An eGFR <60ml/min/1.73m2, described as a ‘severe risk factor’ for ocular toxicity[3], was present in 56% (68/121) of patients on hydroxychloroquine (see table 1). 54% (30/56) of patients with lupus

nephritis prescribed hydroxychloroquine had not been referred to ophthalmology prior to the QIP intervention. The post-intervention data has not been collected at the time of writing.

Discussion

The unsurprisingly high prevalence of excretory renal impairment (eGFR <60/min/1.73m2) in this study demonstrates that our cohort is a high risk group warranting close ophthalmological monitoring. It is important to note that hydroxychloroquine retinopathy is more frequent than previously reported with a prevalence of approximately 7.5% that can increase to 20-50% after 20 years of therapy[4]. The majority (54%) of patients with lupus nephritis prescribed hydroxychloroquine had not been referred to ophthalmology, as recommended by the latest guidance, prior to the QIP intervention. We anticipate that our intervention will improve rates of ophthalmology referral.