

Clinical audit of hydroxychloroquine dosing and toxicity screening in patients with inflammatory arthritis and other connective tissue diseases

Aims/objectives:

To determine whether appropriate hydroxychloroquine (HCQ) dosing and toxicity screening is elicited during regular clinical encounters for patients with inflammatory arthritis and connective tissue diseases.

Evidence/Guidelines:

We defined best practice standards for hydroxychloroquine dosing and toxicity screening using the American College of Rheumatology and American College of Ophthalmology recommendations:

American College of Rheumatology. Screening for hydroxychloroquine retinopathy. American College of Rheumatology: Position Statements. August 2011. <http://www.rheumatology.org/Practice-Quality/Administrative-Support/Position-Statements>

Marmor MF, Kellner U, Lai TY, et al. Revised Recommendations on Screening for Chloroquine and Hydroxychloroquine Retinopathy. February 2011. Ophthalmology, 118:415-422.

NB: American guidelines were used, as the CRA does not currently have recently updated recommendations on hydroxychloroquine use. The last Canadian Consensus Conference on hydroxychloroquine was in 2000.

Audit Standards:

Guideline suggestions	Adherence goal (%)
1. Patients beginning, or already on, hydroxychloroquine should have had a risk factor assessment for increased toxicity, and the results should be clearly recorded	80
2. Daily doses should be limited to 400mg of hydroxychloroquine, and lower doses be used for individuals who are of short stature (in the range of 6.5 mg/kg calculated on the basis of ideal body weight).	100
3. Patients starting hydroxychloroquine should have a complete baseline ophthalmologic examination within the first year of treatment.	100
4. Patients considered low risk with a normal ophthalmological examination, no further special ophthalmologic testing for hydroxychloroquine toxicity is needed for the first 5 years.	60
5. Patients considered high risk, or those who have been on hydroxychloroquine for over 5 years, need annual eye examination	100
6. Patients with suspected hydroxychloroquine retinopathy should have the drug stopped.	80

**Ideal body weight can be calculated using the Devine Formula:*

men: *Ideal Body Weight (in kg) = 50 + 2.3 kg per inch over 5 feet.*

women: *Ideal Body Weight (in kg) = 45.5 + 2.3 kg per inch over 5 feet.*

Date		Patient ID		Gender		DOB	
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Diagnosis	<input type="checkbox"/> RA <input type="checkbox"/> SLE <input type="checkbox"/> Other _____	Patient Ideal Body Weight (kg)	
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Is HCQ a new prescription at this visit?	<input type="checkbox"/> Yes <input type="checkbox"/> No
If previously prescribed, how long has the patient been on HCQ?	_____
Current dose:	Total Daily Dose:

Is patient considered high risk for HCQ toxicity?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Factors increasing the risk of HCQ retinopathy	<input type="checkbox"/> Elderly (Age > 65) <input type="checkbox"/> Duration of use of hydroxychloroquine >5 years <input type="checkbox"/> Daily dose >400mg/day <input type="checkbox"/> Kidney or liver dysfunction <input type="checkbox"/> Retinal disease or maculopathy

Has this patient had a baseline ophthalmological exam in the first year of taking HCQ?	<input type="checkbox"/> Yes <input type="checkbox"/> No
If the patient is low risk, and had a normal initial ophthalmological exam, did they have further eye exams within 5 years?	<input type="checkbox"/> Yes <input type="checkbox"/> No
If the patient is high risk, or has taken HCQ >5 years, are they getting annual eye exams?	<input type="checkbox"/> Yes <input type="checkbox"/> No

Has the patient ever had an abnormal eye exam	<input type="checkbox"/> Yes <input type="checkbox"/> No
Was HCQ discontinued due to the abnormal exam?	<input type="checkbox"/> Yes <input type="checkbox"/> No

Comments	
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