

Efficacy of Hydroxychloroquine in Primary Hand Osteoarthritis: a randomized, double-blind, placebo controlled trial

INT-008

E.J. Ruijgrok¹, W.C. Lee¹, B.M. Boxma - de Klerk², M.R. Kok³, A.E.M. Weel³, M. Kloppenburg⁴, N.M. Basoski³

Hospital Pharmacy¹, Research Department², Rheumatology³, Maasstad Hospital Rotterdam, Rheumatology and Clinical Epidemiology, Leiden University Medical Center⁴



Objectives

Pharmacological treatment options of hand osteoarthritis (hand OA) are limited. Hydroxychloroquine (HCQ) has been used successfully in the treatment of mild rheumatoid arthritis for many years and is believed to be beneficial in hand OA as well. In this trial we studied the symptom modifying effect of HCQ in primary hand OA.

Trial design

- Multicenter, double-blind, placebo controlled
- 200 patients
- Primary hand OA (ACR criteria)
- Treatment HCQ 400 mg/dag or placebo (24 weeks)
- Primary outcome VAS pain at 24 weeks

Inclusion criteria	Exclusion criteria
Age \geq 40 year	NSAIDs/corticosteroid \leq 7 d
Pain \geq 1 year	HCQ \leq 3 months before trial
NSAIDs \geq 1 pain episode	end stage hand OA
	retinopathy

Results

	Placebo (n=98)	HCQ (n=98)
Age	57.9 (7.6)	57.3 (7.6)
Female (%)	84	88
Radiographical OA*, %	91	86
Pain VAS, mm	45.3 (23.0)	43.3 (22.3)
Total AUSCAN	5.1 (1.9)	5.2 (1.9)
Total AIMS2-SF	3.9 (1.2)	3.8 (1.2)

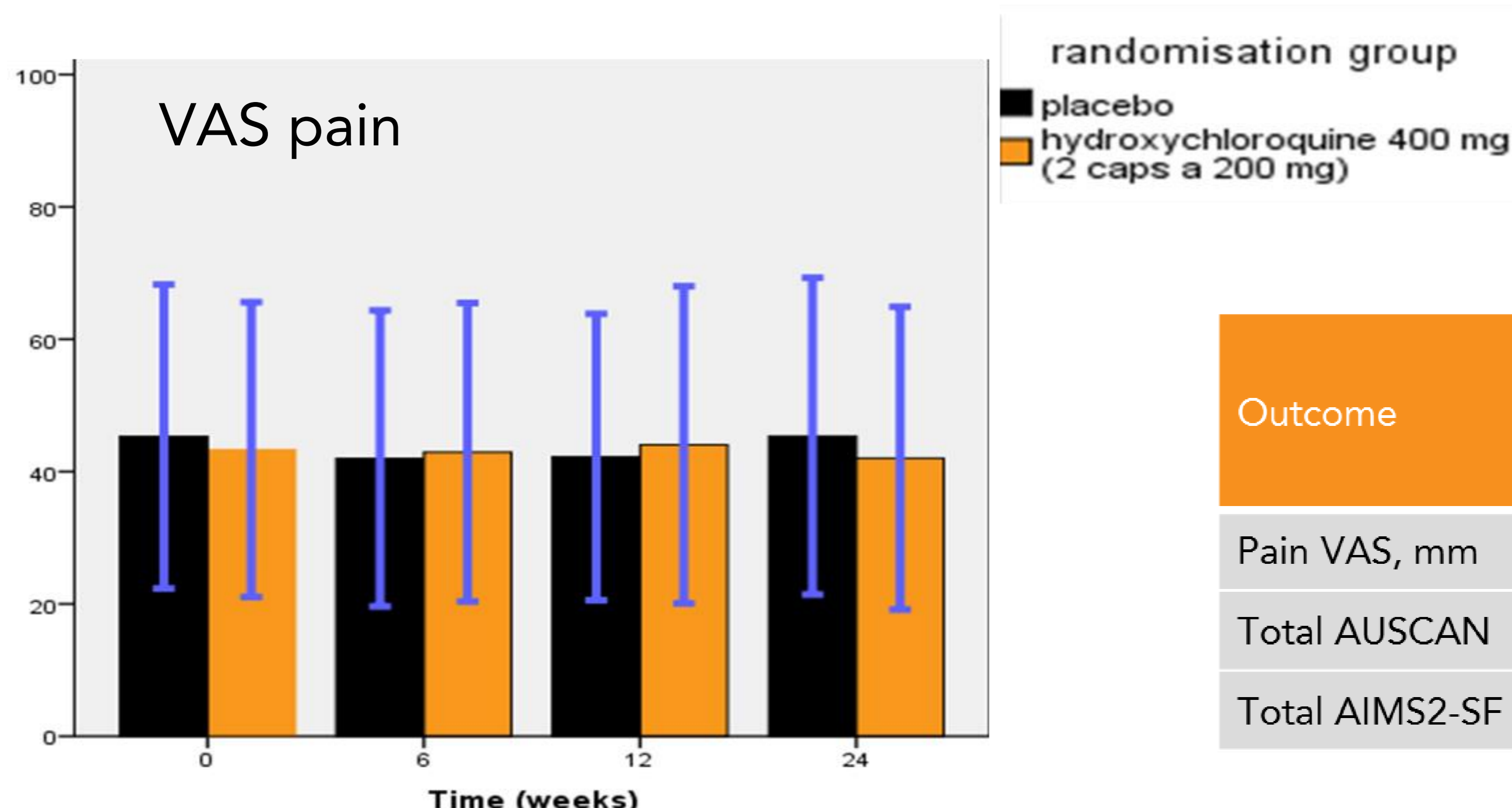
* Minimal 1 joint Kellgren-Lawrence \geq 2

Adverse events

	Placebo (n=98)	HCQ (n=98)
Patiënten with AE	24	21
Reported AE	40	36
Gastrointestinal	7	7
Allergic reaction	0	3
Rash/pruritis	3	8
Nausea	4	1
Headache	4	2
Otherwise/not specified	22	15

VAS, AUSCAN and AIMS at 24 weeks

Outcome	Placebo Mean difference (95% CI)	HCQ Mean difference (95% CI)	P value
Pain VAS, mm	+0.10 (-47.7; 47.9)	-1.3 (-49.7; 48.4)	0.82
Total AUSCAN	-0.25 (-2.8; 2.3)	-0.42 (-3.3; 2.5)	0.49
Total AIMS2-SF	-0.17 (-1.7; 1.3)	-0.076 (-1.8; 1.6)	0.68



Conclusions

This study shows that 24 weeks of treatment with HCQ in symptomatic hand OA did not reduce pain when compared to placebo. Also, no difference was observed in change of AUSCAN scores or AIMS2-SF scores between both treatment groups. These results suggest that HCQ should not be prescribed in patients with primary hand OA with mild to moderate pain symptoms.