

Discharge Associated with Artificial Eyes

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Background

Mucoid discharge is a pervasive and inconvenient condition associated with artificial eye wear – it is the main current concern for anophthalmic patients after health of the remaining eye*.

Aim

The aim of this study was to investigate artificial eye cleaning regimes and their association with discharge experience.

Method

1373 letters were posted and 429 artificial eye wearers (31.25%) completed and returned the questionnaire. The questionnaire included a self assessment form containing visual analogue scales for describing discharge. The scales were used to self measure 4 discharge characteristics: frequency, colour, volume and viscosity. Statistical analysis was carried out using IBM SPSS. The Kruskal Wallis test was used to analyse associations between discharge experience and frequency of cleaning of artificial eyes .

Results

Cleaning and removal regimes significantly affected discharge frequency ($p<0.0001$) and discharge volume ($p=0.001$). Less frequent cleaning was associated with less severe discharge. Cleaning regimes did not affect discharge colour or viscosity.

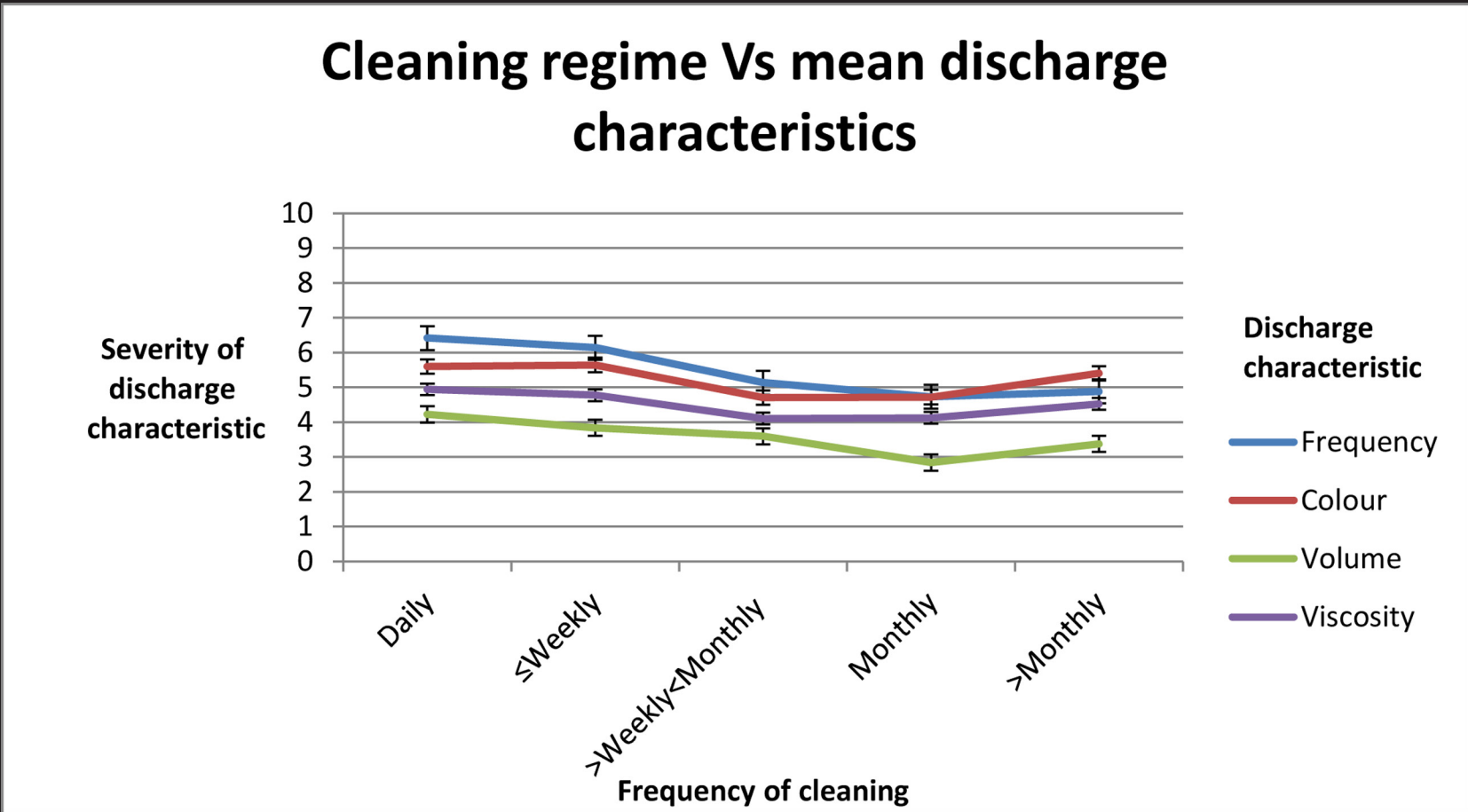
Of the reasons given for cleaning artificial eyes more often than weekly 40% cited discharge, 30% hygiene, 14% discomfort, 10% instructions, 5% habit and 2% other. The reasons given for removing and cleaning artificial eyes monthly were: discharge (17%), hygiene (42%), advised (21%), discomfort (9%), habit (9%) and other (2%).

Conclusions

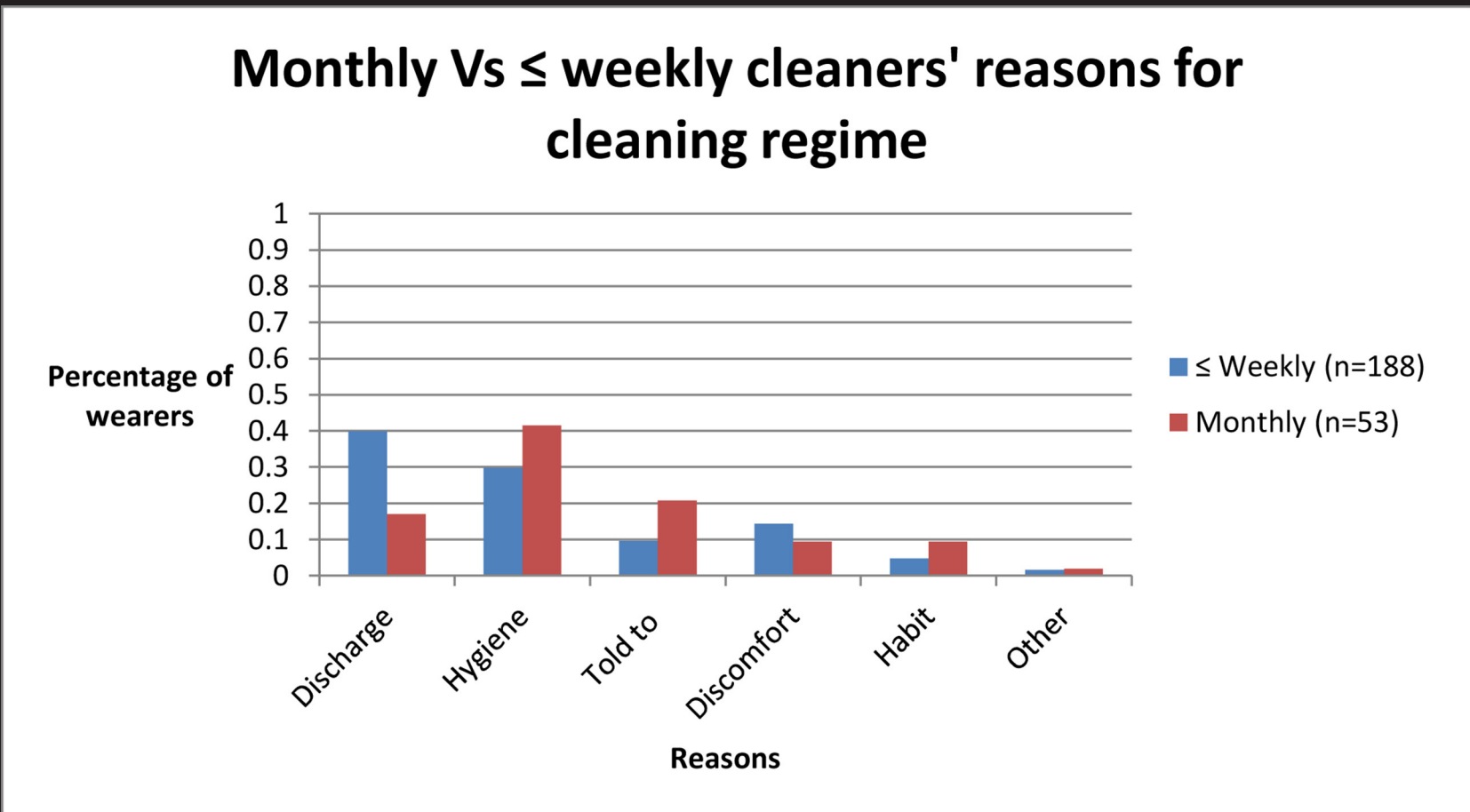
The finding that less frequent cleaning was associated with less severe discharge does not indicate the direction of the effect. However, twice as many monthly cleaners than daily cleaners cited professional advice as the reason for their particular regime. This suggests that some wearers at least were able to break their habit and join the group that experienced significantly less discharge. Further causal evidence may be found by investigating the physical interface between the prosthesis and the conjunctiva.

FREQUENCY OF DISCHARGE										
Never	Monthly	Weekly	Twice weekly	Daily	Twice daily	Continuously				
0	1	2	3	4	5	6	7	8	9	10
COLOUR OF DISCHARGE										
Clear	White			Cream			Yellow			
0	1	2	3	4	5	6	7	8	9	10
VOLUME OF DISCHARGE										
Minimal									Profuse	
0	1	2	3	4	5	6	7	8	9	10
VISCOSITY (stickiness/thickness) OF DISCHARGE										
Runny	Stringy		Moderately thick				Very thick			
0	1	2	3	4	5	6	7	8	9	10

Visual analogue scale used for self measuring discharge .



Frequency, colour, volume and viscosity of discharge as a function of different removal and cleaning regimes.



Reasons for adopting a specific cleaning regime by wearers who cleaned ≤ weekly compared to wearers who cleaned monthly.