



The Use of Silicone Hydrogel Contact Lenses by Canadian Optometrists: 2000-2006



Deborah A Jones¹, Craig A Woods², Lyndon W Jones², Philip B Morgan³

¹School of Optometry, University of Waterloo, Ontario, Canada

²Centre for Contact Lens Research, School of Optometry, University of Waterloo, Ontario, Canada

³EuroLens Research, University of Manchester, United Kingdom

Introduction

- Many different contact lens types and wearing modalities exist
- Analyzing the prescribing habits of contact lens practitioners gives an indication of current trends and may predict future changes within the market
- Analyzing prescribing habits also indicates the impact that new products have had on patient care

Purpose

- To evaluate the silicone hydrogel (Si-H) lens fitting preferences of Canadian optometrists, from 2000 to 2006
- To determine trends in fitting that occur as new lenses are released into the market

Methods & Materials

- A contact lens fitting survey¹⁻⁶ was distributed annually, in January, to 1000 randomly selected Canadian optometrists
- Provinces were proportionately represented
- Practitioners were asked to complete details for the next ten consecutive patients fit with contact lenses. Patients could be new to contact lenses or be existing wearers being refit with contact lenses
- Practitioners were asked to return the surveys by the end of March even if ten patients had not been fit
- To compensate for the different levels of practitioner activity a weighting factor was given to all fits for each practitioner
- The information compiled included:
 - Date of fitting, age, gender, new fit or refit, lens material type, lens design, frequency of replacement, modality of wear, use per week and care regimen

Results

- Response rate was 14.4% over 7 years (1008 surveys returned)
- Soft lenses were fit to 91.3% of patients
- 9,340 fits reported, of which 1,582 were for Si-H lenses

Results

Contact lens materials

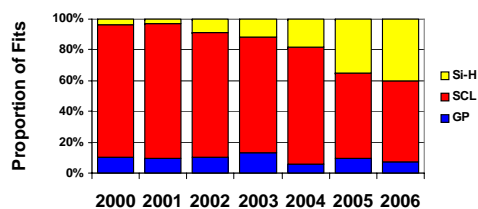


Figure 1: Distribution of contact lens materials for all fits

Si-H: daily vs extended wear

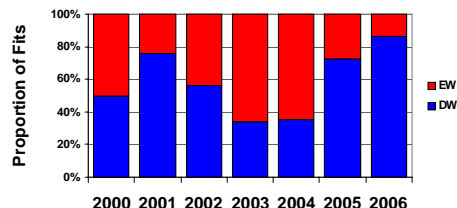


Figure 2: Distribution of DW vs EW for Si-H lenses

Soft lens care products

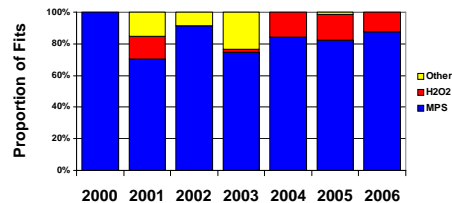


Figure 3: Distribution of lens care products used for Si-H lenses

Results

Replacement frequency

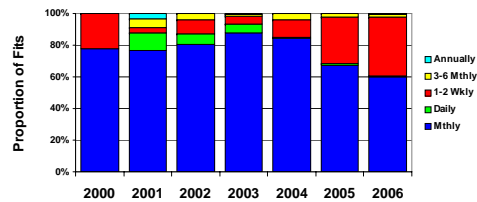


Figure 4: Distribution of replacement frequency – all fits

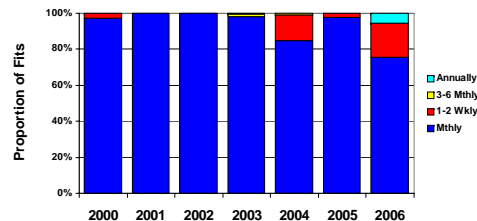


Figure 5: Distribution of replacement frequency – Si-H EW

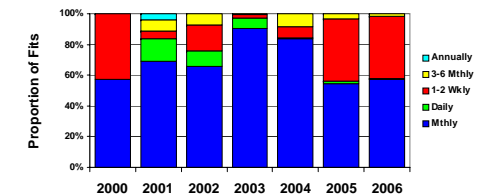


Figure 6: Distribution of replacement frequency – Si-H DW

Results

New vs Refit

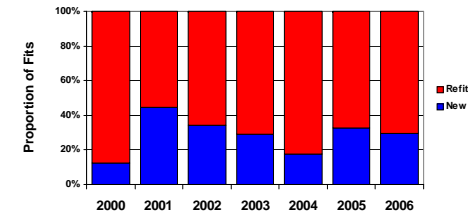


Figure 7: Distribution of all DW fits

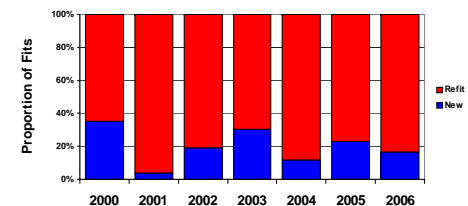


Figure 8: Distribution of all EW fits

Discussion

- Si-H lens fits increased from 5.4% to 42.9% over 7 years
- Proportion of Si-H fit for daily wear increased from 33.7% in 2004 to 86.1% in 2006
- 2004 saw an increase in 2 weekly replacement of Si-H
- Multipurpose solutions were prescribed for 87.4% of patients

Conclusions

- Canadian optometrists fit a large proportion of their patients with Si-H lenses
- New products have been embraced by the profession
- Si-H lenses are mainly used for daily wear

References

- Morgan PB, Eillon N, Holland M, Jones L, Woods CA and van der Worp E. (2001) 'How does the UK market compare with other countries?' *The Optician* 221 (5/7/01): 28-32
- Morgan P, Eillon N, et al. International contact lens prescribing. *Contact Lens Spectrum* 2002; 17:1: 42-45.
- Morgan P, Eillon N, et al. International contact lens prescribing 2003. *Contact Lens Spectrum* 2003; 18:1: 40-43.
- Morgan P, Eillon N, et al. International contact lens prescribing in 2003. *Contact Lens Spectrum* 2004; 19:1: 34 - 37.
- Morgan P, Eillon N, et al. International contact lens prescribing in 2004. *Contact Lens Spectrum* 2005; 20:1: 34 - 37.
- Morgan PB, Eillon N, et al. International contact lens prescribing in 2006. *Contact Lens Spectrum* 2006; 21:1: 35 - 39.