Suggested Reference

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Retrospective case-series from a Myopia Control Clinic

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Background
- Myopia continues to increase in both prevalence and severity.
- There are now many interventions which have demonstrated a reduction in myopia progression in randomised trials.
- We opened a part-time Myopia Control Clinic to the public in 2010 to promote the use of such therapies.

Case Series
- 110 patients seen between 2010-2014.
- Mean age 12.13 ± 4.58, range 4-34 years old.
- Previous progression determined from clinical records.
- Patients offered Orthokeratology (OK), Dual Focus Contact Lenses (DFCL), and advice.
- Biometry and refractive changes measured approximately every six months.
- Operated as an optometric practice, not a clinical trial.

Results
- OK reduced myopia progression from -1.17 ± 0.55 D/yr to -0.09 ± 0.17 D/yr (n = 52, p < 0.001)
- DFCL reduced myopia progression from -1.15 ± 0.46 D/yr to -0.10 ± 0.23 D/yr (n = 32, p < 0.001)
- No significant difference between efficacy (F(1,82) = 0.092, p = 0.763) or biometric growth between OK and DFCL (AXL (F(1,61) = 1.470, p = 0.230), VCD (F(1,61) = 1.809, p = 0.184)).
- Higher myopia progression was associated with younger age (t_{100} = 0.294, p=0.002).
- Chair time was significantly higher in OK group (8.64 ± 2.1 hours vs 4.36 ± 1.0 hours, χ² = 55.381, p < 0.0001).
- Increased chair time in OK group was associated with higher myopia progression rates ³ = -0.423, p = 0.002).
- Only one major adverse outcome (presumed keratitis) over the four year period in an OK patient.

Disclosures and acknowledgements
A full paper of this abstract has been submitted for publication in Optometry & Vision Science, and is currently under review. JP is an inventor on a patent for a DFCL design. Some products were received at a reduced cost from suppliers, however discounts were not offered to patients.