

Evaluation of a novel flexible lip retraction system by UK practitioners.

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Program number 608

INTRODUCTION

- 1993 saw the establishment of a group of practicing dental practitioners, the PREP (Product Research and Evaluation by Practitioners) Panel¹, prepared to complete evaluations of new materials and techniques in the practice environment. To date, over 40 evaluations, including handling evaluations and clinical trials², have been completed. The PREP panel presently has 29 members (61% holding post-graduate qualifications) with an average time since graduation of 21 years. The Panel has a UK-wide distribution and a wide range of dental interests facilitating the assessment of a full range of products and techniques.
- The purpose of this study is to evaluate the handling properties of a new flexible lip retraction system (Optragate, Ivoclar Vivadent UK), which consists of 2 flexible plastic rings connected by a latex free plastic material. (Fig. 1) It was tested in 2 sizes, Regular and Small but is also now available in a Junior sizing for young patients.



Fig 1: Optragate

METHOD

- Twelve dental practitioners from the PREP Panel were chosen at random and sent twenty of the retractors along with a questionnaire designed to evaluate the presentation, handling and ease of use of the system. Most responses were given on a visual analogue scale (VAS). The evaluators were also asked the reasons for use of lip retraction systems, and to compare the currently used system with the new retractor.

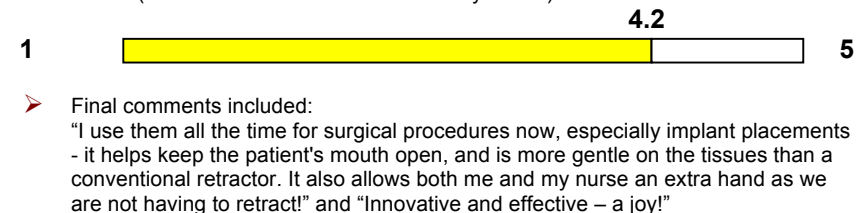
BACKGROUND INFORMATION

- Ten (83%) of the evaluators currently used a lip retraction system. All but one evaluator used the plain plastic photographic type of retractor. Nine (75%) used the retractors for photography and 4 (33%) for an aid to isolation. The evaluators rated the **ease of use** of the currently used lip retraction system on a VAS (where 1 = difficult to use & 5 = easy to use) as follows:



RESULTS

- Six (50%) of the evaluators stated that the sizes provided were adequate. The remaining 50% all stated that the regular size was too large and a smaller size than 'small' was required. (See note in Introduction).
- When asked if Optragate adequately protected the lips, 9 (75%) stated that it did. The remaining three evaluators (25%) all stated that the bottom lip slipped out.
- 58% (n=7) of the evaluators did encounter difficulties at first with the use of Optragate. Comments made by these evaluators included: "Initially difficult but with practice – and Vaseline- I could slip it on almost undetected!" and "Needs to be moist to fit"
- Patient comments reported included: "Easier to keep my mouth open", "More comfortable then rubber dam" and "Uncomfortable behind lower lip"
- Just one evaluator reported a symptom or side effect from the use of Optragate, and that was hypersalivation in 2 cases.
- Eight (67%) of the evaluators stated that they would purchase the Optragate system and 9 (75%) that they would recommend the system to colleagues.
- The evaluators rated the **ease of use** of the currently used lip retraction system on a VAS (where 1 = difficult to use & 5 = easy to use) as follows:



- Final comments included: "I use them all the time for surgical procedures now, especially implant placements - it helps keep the patient's mouth open, and is more gentle on the tissues than a conventional retractor. It also allows both me and my nurse an extra hand as we are not having to retract!" and "Innovative and effective – a joy!"

CONCLUSIONS

The Optragate lip retraction system has been subject to an extensive clinical evaluation in which it scored better for ease of use than the lip retraction system used previously. The majority of evaluators would both purchase the system and recommend it to colleagues. The sizes of Optragate provided for this evaluation did prove problematic with 50% of the evaluators requiring a smaller size (now provided). This was a product that seemed to gain favour and find more applications the more it was used

ACKNOWLEDGEMENT

The support of Ivoclar Vivadent UK is acknowledged. The authors also wish to thank the participating practitioners.

REFERENCES

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2. Burke, F J T, Crisp R J et al. Two-year evaluation of restorations of a packable composite placed in UK general dental practices. BDJ 2005; 199(5): 293-296