

Table 2 Distribution (%) of Indications for Restoration Assuming Existing Restorations Are Worn out

Restoration type	Re-restoration with resin composite		Re-restoration with resin composite while covering (additional) cusp(s)		Crowning	
	Operative Department	Prosthodontic Department	Operative Department	Prosthodontic Department	Operative Department	Prosthodontic Department
MOD amalgam (n = 160)*	69	42	11	15	20	39
MOD resin composite (n = 160)†	60	41	19	15	21	41
MODS resin composite (n = 80)	60	25	5	2	35	72
MODNS resin composite (n = 80)	60	22	5	5	35	72

*4% of Prosthodontic Department advised re-restoration with amalgam with coverage of cusps (for molars).

†3% of Prosthodontic Department advised re-restoration with amalgam with coverage of cusps (for molars).

MOD = mesio-occlusodistal; MODS = MOD with supporting cusps covered; MODNS = MOD with nonsupporting cusps covered.

greatest for premolars (interaction between material and tooth type; $P < .050$). Operative observers indicated 70% re-restoration with resin composite and 30% crowns, whereas prosthodontic observers more often indicated crowns (50%). This difference was significant for the four restoration types (all $P < .050$; Table 2). Intraobserver agreement was moderate ($\kappa = .51$).

Discussion: Results suggest that the operative teachers had more confidence in the clinical behavior of resin composite-restored teeth than did those in prosthodontics. This was reflected in the higher percentage of decisions to re-restore with resin composites instead of crowns. Noted differences between the departments, as well as moderate intraobserver agreement and relatively high standard deviations (Table 1), might interfere with consistent educational clinical decisions within a dental school.

Conclusion: Fracture risk for teeth with MOD restorations was judged with low agreement by dental teach-

ers from two clinical departments. Moreover, the indication to make a crown appears to depend substantially on the teacher's department.

Acknowledgments

The authors are grateful to students D. J. M. Schmeitz and F. A. Janse for their work on this study.

References

1. Bader JD, Shugars DA, Roberson TM. Using crowns to prevent tooth fracture. *Community Dent Oral Epidemiol* 1996;24:47–51.
2. Fennis WMM, Kuijs RH, Kreulen CM, Roeters FJM, Creugers NHJ, Burgersdijk RCW. A survey of cusp fractures in a population of general dental practices. *Int J Prosthodont* 2002;15:559–563.
3. Kronström M, Palmqvist S, Söderfeldt B. Prosthodontic decision making among general dentists in Sweden. I: The choice between crown therapy and filling. *Int J Prosthodont* 1999;12:426–431.
4. van der Sanden WJM, Mettes DG, Plasschaert AJM, Mulder J, Verdonschot EH. The influence of providing a clinical practice guideline on dental students' decision making. *Eur J Dent Educ* 2004;8:1–6.

Literature Abstract

The influence of some different factors on the accuracy of shade selection

The purpose of this study was to determine the effects of the light source, the experience of the observer, and the thickness of porcelain on the accuracy of shade selection. Vita shades of A1, A3, A4, B2, B4, C1, C3, D2, and D4 were fabricated from two different porcelains in 0.5-, 1.0-, and 1.5-mm samples. Ten experienced and 10 novice observers were solicited to select the shades in both adverse and ideal light conditions. An adverse light condition was represented by fluorescent ceiling light and natural light from the window. A Duro-test Vitalite lamp fixed above the samples was used to represent the ideal light source. The chi-square test for independence at a probability level of $P < .05$ was used to show significant difference. Results show that light quality was the most critical factor in shade selection, followed by the thickness of the samples. The thicker the samples, the better the shade selection. Observer experience was also an important factor, although it was not significant when the selection was performed in adverse light conditions.

Dagg H, O'Connell B, Claffey N, Byrne D, Gorman C. *J Oral Rehabil* 2004;31:900–904. **References:**

11. **Reprints:** Catherine Gorman, Department of Restorative Dentistry, Cork University Dental School and Hospital, Wilton, Cork, Ireland. e-mail: c.gorman@ucc.ie—Esquivel-Upshaw, San Antonio, TX

Copyright of International Journal of Prosthodontics is the property of Quintessence Publishing Company Inc. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.