

Dear Sir:

The subject of cost-effectiveness of sealants, reviewed by MITCHELL & MURRAY (1) in the February 1989 issue, seems to be one of endless fascination. It has been vigorously debated for some months on the DENT:FORUM computer conference in the United States without clear resolution, though it has sharpened several particular issues. One is why the cost-effectiveness argument in prevention seems confined to sealants; should no other preventive procedures be subjected to the same scrutiny? Another is that cost-effectiveness is only helpful in policy determinations in a comparative sense, so the argument is cost-effectiveness of a procedure compared to something else, such as another procedure or nothing. Cost-effectiveness permits comparison among alternative procedures seeking the same basic objective (2), so the argument on sealants really only takes shape when sealants are being compared to other procedures, for example fluoride mouthrinsing. The conclusions reached by MITCHELL & MURRAY on these issues were not clear.

Perhaps a major philosophical issue is whether sealants should be considered a

preventive or restorative procedure. The "apples versus oranges" argument of comparing sealants with amalgams is held by those who see sealants only as a preventive procedure; this argument was discussed at length in another report (3). If sealants are a preventive procedure then they must be compared with lower-cost fluoride alternatives, a comparison which clearly may not be favorable to sealants. If sealants are thought of as a restoration, however, then they are compared with amalgams, composites, and perhaps other variations of the acid-etch technique. It is likely that such comparisons would be much more favorable in the long-term because the objectives then are stated differently. The evidence to

favor sealants as a substitute for amalgams in treating incipient lesions, of which the study by LEVERETT *et al.* (4) is a good example, seems to strengthen the philosophical base for thinking of sealant as a restoration which conserves tooth structure. If they are seen this way, their cost-effectiveness may look more favorable, and the goal we all have of increasing their appropriate use among dentists may thus be more likely.

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#### References

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2. WARNER KE, LUCE BR. *Cost-benefit and cost-effectiveness analysis in health care*. Ann Arbor, MI; Health Administration Press, 1982.
3. AMERICAN DENTAL ASSOCIATION, COUNCIL ON DENTAL RESEARCH. Cost-effectiveness of sealants in private practice and standards for use in prepaid dental care. *J Am Dent Assoc* 1985; 110: 103-107.
4. LEVERETT DH, HANDELMAN SL, BRENNER LM. Use of sealants in the prevention and early treatment of carious lesions: cost analysis. *J Am Dent Assoc* 1983; 106: 39-42.

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