DENTIN HYPERSENSITIVITY, ACID EROSION, HIGH CARIES INDEX, MANAGEMENT OF ALVEOLAR OSTEITIS, AND XEROSTOMIA

DENTIN HYPERSENSITIVITY

Suggested steps in resolving dentin hypersensitivity when a thorough exam has ruled-out any other source for the problem:

Treatment Steps

- Home treatment with a desensitizing toothpaste containing potassium nitrate (used to brush teeth as well as a thin layer applied, each night for 2 weeks)
- If needed, in office potassium oxalate (Protect by Butler) and/or in office fluoride iontophoresis
- If sensitivity is still not tolerable to the patient, consider pumice then dentin adhesive and unfilled resin or composite restoration overlaying a glass ionomer base
- The use of 5% sodium fluoride varnishes (Duraflor and Duraphat) have been encouraged for the prevention of decay in persons of high-risk populations and also show some efficacy for reducing sensitivity following multiple applications.
- Gluma is a brand name desensitizer used in dentistry to treat sensitivity. The product is manufactured by Heraeus Kulzer. Its formula of 5% glutaraldehyde and 35% HEMA (hydroxyethyl methacrylate) in water is used to help control both hypersensitive dentin and reduce the incidence of postoperative sensitivity in restorative dentistry procedures.

Home Products (all contain nitrate as active ingredient):

Promise
Denquel
Sensodyne
THERADENT

Other major brand name companies have added ingredients to their dentifrice product lines that also make hypersensitivity claims.

REFERENCE

Miglani S, Aggarwal V, Ahuja B. Dentin hypersensitivity: Recent trends in management. *J Conserv Dent.* 2010;13(4):218–224.

ACID EROSION

Acid erosion is the loss of tooth enamel through prolonged exposure to acid rich foods, beverages, and even fruits. The problem has been raised primarily in pediatric patients and can be significant. Several oral care products claim surface remineralization efficacy and should be coupled with dietary counseling to achieve a desirable reduction in tooth damage.

ReNew Remineralizing and Desensitizing Paste
Sensodyne ProNamel for Children
Recaldent, found in GC America's Prospec MI Paste with Recaldent and Trident XTRA CARE chewing gum
Amorphous calcium phosphate (ACP) found in Arm & Hammer Enamel Care Toothpaste
Premier Dental's Enamel Pro polishing paste
SensiStat, found in Ortek Therapeutic's ProClude and DenClude products
NovaMin, a synthetic mineral composed of calcium, sodium, phosphorus, and silica

ANTICARIES AGENTS

Fluoride (Gel 0.4%, Rinse 0.05%) on page 752

New toothpastes with triclosan such as Colgate Total show promise for combined treatment/prevention of caries, plaque, and gingivitis. The use of 5% sodium fluoride varnishes (Duraflor and Duraphat) have been encouraged for the prevention of decay in persons of high-risk populations.

FLUORIDES

Used for the prevention of demineralization of the tooth structure secondary to xerostomia. For patients with long-term or permanent xerostomia, daily application is accomplished using custom applicator trays, such as omnivac. Patients with porcelain crowns should use a neutral pH fluoride (see Fluoride monograph on page 752). Final selection of a fluoride product and/or saliva replacement/stimulant product must be based on patient comfort, taste, and ultimately, compliance. Experience has demonstrated that, often times, patients must try various combinations to achieve the greatest effect and their highest comfort levels. The presence of mucositis during cancer management complicates the clinician's selection of products.