Handout Treating the High Risk Caries Patient Harald O. Heymann, DDS MEd

Who is at high risk?

Older patients are at elevated risk due to:

- Reduced saliva flow (this is THE most significant predisposing factor)
- Xerostomic drugs, that contribute to dry mouth
- Compromised dexterity resulting in plaque accumulation
- High carbohydrate/sucrose intake
- Multiple restorations and exposed roots surfaces

Note: Saliva has a profound buffering capacity, and a reduction of saliva flow greatly increases risk of decay.

CAMBRA

Caries Management By Risk Assessment (CAMBRA) is assuming an every increasingly important role in contemporary dental practices. Risk assessment includes disease indicators such as clinical evidence of decay and/or white spots, radiographic evidence of decay and past history of caries. Other risk factors include state of oral hygiene, adequacy of saliva flow, tooth anatomy and dietary factors.

Assessment of these factors in combination with the findings of other diagnostic aids is used to dictate appropriate treatment.

The Fluoride Myth. Fluoride is placed in many materials in dentistry primarily for marketing purposes. You must have sustained fluoride release to be able to realize any anticariogenic potential (Figure 1). Glass ionomers like Fuji IX (Figure 2) or resin-modified glass ionomers (RMGIC), like PhotacFil or Fuji II LC are examples of materials that exhibit an acid/base reaction and have the potential for sustained fluoride release. Compomers exhibit an initial fluoride release but do not sustain it. Ion releasing resins release even less fluoride.



Figure 1 Figure 2

Recommendations for High Risk Caries Patients

- 1. Use of a mechanical toothbrush.
- 2. Prescription for high fluoride dentifrice (Prevident 5000 Plus, Control Rx, Clinpro 5000, etc.).
- 3. More frequent recall intervals (every 3-4 months), especially during Control phase treatment.
- 4. Application of fluoride varnish at each recall. This is probably the most important treatment a dentist can render. Materials like Duraphat (Figure 3) or Vanish (Figure 4) are ideal.





Figure 3

Figure 4

5. Use of Xylitol chewing gums or candies. It is recommended that patients chew gum or use candies containing approximately 2.0 grams of Xylitol after each meal. Not only will this stimulate salvia production, but also it bathes the teeth in Xylitol, which cannot be readily metabolized by cariogenic bacteria in the formation of dental plaque. Products like Hersheys Ice Cubes (Figure 5) which contain about 1.0 gram of Xylitol per cube, are good choices..



Figure 5