

Oral Health and Dementia Patients

Stanley Kim, D.D.S., Fellow in Geriatric Dentistry

Oral hygiene care for patients with dementia is important for reasons such as proper nutrition intake, weight maintenance, speech, hydration, behavior, moods, and overall general health. However, the tasks of maintaining good oral hygiene can be very challenging for the individual with dementia as well as the individual's support system. Depending on the stage of dementia, oral hygiene needs can become a complicated task. Challenges range from preventing high incidence of tooth decay, unmasking behavior problems originating from oral discomfort, to managing uncooperative patients who display resistance to daily oral hygiene tasks.

One major problem that the dementia population faces on a daily basis is dry mouth resulting from age and side effects of medications. Reduced salivary gland function results in the reduction of saliva in the oral cavity. High incidence of caries and plaque formation can be directly tied to decrease in saliva. Saliva acts as an agent for remineralization of the surfaces of teeth. An oral lesion, an agent for discomfort, is also a direct result from decreased salivary flow. Imagine a wound on a dry surface. Saliva substitutes, which come in a spray or gel form, can be applied as often as needed to increase comfort in the mouth. However, salivary substitutes do not increase salivary production. Although medications to increase salivary secretion are available, it comes with undesirable side effects.

Another major issue is the proper removal of plaque from the oral cavity. Improper removal of plaque can result in gingivitis and tooth decay. Gingivitis can cause painful, bleeding gums. Without proper debridement, a more serious problem of losing bone attachment to the roots of the teeth can occur, known as periodontitis. Daily oral hygiene and intermittent professional care to remove plaque and tartar build up will decrease gingivitis. Dental professionals can also prescribe antimicrobial oral rinses such as chlorhexidine. This medication in conjunction with daily oral hygiene will decrease gingival infections resulting from plaque. All this effort can improve comfort and help maintain a good quality of life for patients with dementia.

Specific strategies should be incorporated in providing oral health care for patients with dementia. Having the patient in a comfortable position in a familiar surrounding is recommended for facilitating the task. Slow, clear verbal approach is necessary. Moving slowly with gentle touch and explaining the intent of the session with assurances will alleviate tension. The oral

cavity is a sensitive, intimate orifice of the body, and this approach will aid in providing the patient with respect. Depending on the stage of dementia, the caretaker can begin the task, and then the patient can complete the task his or herself. Distractions such as music or items placed in the patient's hands can also be used as a comfort mechanism during the session. If the patient uses the instruments in a harmful inappropriate way, the caregiver should intervene. Starting over with a different caregiver at a different time may be necessary. Help from relatives can also be a good strategy.

Finally, if the patient is in a nursing home environment, an oral assessment tool should be part of the patient's daily care. Patients in nursing homes can be categorized as being independent, needing some assistance, or needing full assistance. Keeping records of behavior and dental problems can be an important monitoring system to increase the quality of care. Evaluations should be done for patients who are independently performing oral hygiene as well as noting aspects that require assistance.

Increasingly more studies are recognizing the role that oral health plays in overall systemic health. The importance of maintaining oral health for the population with dementia is a high priority. Respect of the individual with dementia, persistence, and the cooperation of caregivers, can overcome the challenges of maintaining good oral hygiene.

Research News

Several recent papers have supported the *cognitive reserve hypothesis*. This was first postulated by Robert Katzman's group in the 1980s. The theory states that persons with higher education may have greater brain reserve, and that they may not manifest the symptoms of Alzheimer's disease (AD) as early as persons with lower education. One of the problems with this theory was that lower education might be a proxy for poverty, different lifestyles, and other risk factors. A study from the CAIDE group (Neurology, 69:1442-50, 2007) found that after controlling for various risk factors such as SES, lifestyles, sociodemographics, and vascular factors, the association with education remained. Two studies from Italy (Bracco et al; Dement Geriatr Cogn Disorders 24: 483-49, 2007) and France (Braundet et al; Dement Geriatr Cogn Disorders 25:74-80, 2008) found that persons with greater education deteriorated more quickly once the disorder is recognized. Thus, reserve may buffer against the manifestations of AD in the early stages, but at some point, AD pathology may overwhelm the individual.