Dementia is the permanent loss of multiple intellectual functions resulting from neuronal death. Dementia afflicts 10% of individuals over the age of 65 and these patients survive approximately seven years with their cognitive impairment. Most (60%) nursing home residents have cognitive impairment. Although Alzheimer's disease is the most common cause of dementia (65%), other causes include vascular (15%), alcoholic (5%-15%) as well as multiple rare diseases. These dementias have similar clinical features. Patients with dementia have ongoing needs for oral care. Oral pathology can result in poor nutrition, pain, distress and agitation. Dementia patients need special consideration for management by the dentist.

The basic symptoms of dementia include: (1) amnesia, i.e., memory loss, (2) aphasia, i.e., communication difficulties, (3) apraxia, i.e., inability to perform complicated motor tasks, and (4) agnosia, i.e., inability to recognize previously learned sensory input -- e.g., faces. Some dementia patients also manifest psychiatric symptoms that include hallucinations, delusions, depression, personality changes and aggressive behavior. This combination of cognitive and psychiatric symptoms makes dementia patients a challenge for oral care. Most dementia patients deny or hide their cognitive disability.

Patients with dementia and other types of structural brain injury are predisposed to delirium (i.e., abrupt onset, temporary confusion caused by
medical problems or psychotropic medications). Medications prescribed by dentists such as narcotics and benzodiazepines may cause dementia patients to become more confused and unsteady. Approximately 15% of patients over age 65 admitted to the hospital and 3% of nursing home patients suffer from delirium.

The cognitive symptoms of Alzheimer's disease can complicate the dental management in patients. Amnestic patients will forget symptoms and instructions. Since the five-minute recall of Alzheimer's patients is quite limited, patients may need frequent reminders during the dental procedure as to your identity and instruction on how to cooperate. Aphasic patients may fail to understand spoken word (receptive aphasia) or may have difficulty communicating (expressive aphasia). These patients may require a little extra time to elicit clinical symptoms and may not understand all the questions about their dental care. The family caregiver should be present during the clinical assessment to assure accurate history. Amnestic patients may forget allergies to medication and a clinical history from a dementia patient should always involve a knowledgeable family caregiver. Non-verbal communication with significantly aphasic patients is helpful. A frequent smile, a calm, gentle voice and touch, as well as pointing and mimicking can assist with communication in the patient with receptive aphasia.

Apraxic patients frequently forget how to perform complex motor tasks such as brushing teeth, or insertion of dentures. Forgetful patients can place dentures in different parts of the home or nursing home and frequently lose them. Patients in the dental chair may be unable to perform complicated movement with their mouth. The practitioner should oral care by talking with family. More profoundly demented patients may resist attempts to
brush their teeth or insert dentures. The family and dentist may need to develop creative approaches toward assuring minimal oral care to instructions on insertion of dentures, bridges etc. Visual agnosia is common in the elderly and many forget the faces of familiar people. Your long-term dental patient who develops Alzheimer's disease may forget who you are. They may identify you as someone else and fail to recognize the dental office as a scene of medical care. Gentle reminders and frequent reassurances are helpful in lowering the anxiety of the patient. It is better to distract the patient than dispute their false beliefs.

Many Alzheimer patients develop psychiatric symptoms during the course of their illness. Hallucinations (25%), delusions (30%), hostility (25%) and depression (30%) are some of the many behavioral symptoms present in Alzheimer patients and other dementias. Few Alzheimer patients are a threat to dental office staff; however, precaution can be taken with at-risk patients. The family should contact the local physician to assess level of risk and an appropriate PRN medication can be used to sedate potentially aggressive patients. For example, one-time dose of ativan (0.25–1 mgm) may produce sufficient sedation for the oral procedure. Adequate use of topical anesthetics will lessen the risk of impulsive activity on the part of the patients. Gas or other major sedatives may worsen confusion rather than improve patient management. A constant, steady, compassionate management style is most effective in reassuring the patient and obtaining maximum patient compliance.

Jacob-Creutzfeldt’s disease is a prion mediated (infectious particle smaller than virus) that accounts for less than 1% of all dementia. Creutzfeldt’s patients progress rapidly and most die within 18 months in contrast to
Alzheimer patients who survive for prolonged periods of time. There is no recorded transmission of Creutzfeldt’s disease through human bites or blood products. Transmission requires inoculation with central nervous system tissue. The Creutzfeldt’s prion is not destroyed by standard autoclave or aseptic technique and requires specialized procedures to assure inactivation. Creutzfeldt’s disease is a difficult clinical diagnosis that requires a neurologist with expertise in the dementias.

Good oral care is essential in the management of Alzheimer patients. Most dementia victims survive approximately 7 years with a range from 3 – 18 years. Alzheimer’s disease can be divided into multiple phases; however, dentists should recognize three stages of illness -- early, middle and late. Early stages (first three years) are characterized by mild forgetfulness and most patients should be able to maintain reasonable oral care. Patients may forget appointments, lose dentures and usually hide their cognitive deficits. Middle stages (3 - 6 years) include all the cognitive symptoms and many psychiatric symptoms. Families may have difficulty providing oral care for mid-stage patients who may be slightly resistive to examination and dental procedures. Late stage patients usually have overwhelming brain injury and forget how to eat, walk, talk or tend to their bodily needs. These patients require passive oral care to prevent oral infection. Many require syringe feedings, feeding tubes or may have PEG tube placement. Alzheimer's patients lose weight for a variety of reasons. Dentists should assure that oral disease is not limiting oral intake. Unrecognized dental pain may be a cause of agitation in the mid-phase patient who is unable to explain his oral symptoms. Painful, broken teeth or abscesses may provoke agitation that is unresponsive to Haldol or Ativan.
The relationship between dental disease and weight loss is unclear. Dentate patients with dementia lose more weight than the edentulous (Hand 1994). Psychotropic medications may promote dental disease, (e.g., xerosiormia) and induce buco-oral movement disorders (e.g., teeth grinding) with tardive dyskinesia.

Dementia is often undiagnosed or misdiagnosed in the elderly. Approximately 20% of confused elders have some other disease that is improved with appropriate treatment. Dentists should encourage families to seek accurate diagnosis of dementia. The local mental health center, neurologist or psychiatrist can perform a mental status examination to screen for dementia. The local physician can perform basic exclusionary studies such as thyroid screen, CAT scan, etc., to exclude treatable causes. Assistance for rural or suburban residents includes home health care, support groups, caregiver education and specialty referral clinics for the dementia patient. Dentists should encourage families to seek appropriate assessment and utilize support services that will assure maximum quality of life for both the patient and the family caregiver.

Dental health professionals can receive free information on dementia by calling 1-800-457-5679. Drug advisory sheets are also available that detail relative safety of common medications in dementia patients.