

# Understanding Parkinson's Dental Health in Parkinson's



If you or a loved one is living with Parkinson's disease (PD), you are surely aware of its complexities. Among these, one that is often overlooked by both neurologists and people with Parkinson's disease is dental health. Why is it so important to address dental health issues? Poor dental hygiene can affect nutrition and increase risk for stroke, cognitive impairment and weight loss. Parkinson's disease often poses unique challenges in establishing and maintaining an effective dental treatment strategy. People of all ages with PD face similar challenges, but for those who are older, the problems can be especially serious.

## Barriers to Dental Health in PD

The factors accounting for diminished dental care in PD are both physical and behavioral.

### *Physical Barriers*

The physical symptoms of Parkinson's disease make daily dental hygiene and periodic dental examinations challenging.

David Kaplan, D.D.S., a retired Columbia University dentist, noted that in people with Parkinson's, "major components of oral hygiene and home care programs ... require muscle eye-coordination, digital dexterity and tongue-cheek-lip control. Tremor and the associated loss and/or lessening of the above faculties mitigate against effective oral hygiene procedures."

Because of poor motor function, nearly half of all people with PD have difficulty with their daily oral hygiene regimen. For example, people with Parkinson's are less likely than others in their age group to clean their dentures daily. Parkinson's symptoms — such as tremor, rigidity and abnormal posture — may make a dentist's examination more difficult. Weakened swallowing ability can increase the risk of aspiration (choking) from some treatments typically used by dentists. Additionally, people with PD who have been on medications like levodopa for several years may begin to develop dyskinesias, which can affect the jaw (oro-buccal dyskinesias) and teeth grinding. These may create problems during dental

exams and at home. People with PD may also experience dry mouth, which can add to chewing difficulties or denture discomfort.

### *Behavioral Barriers*

Behavioral changes that may negatively impact dental care include apathy, depression, and forgetfulness, all of which may lead a person with Parkinson's to pay less attention to his or her daily dental health. Other behavior changes can affect nutrition. For example, people with PD require greater caloric intake than those without PD, but some individuals will actually experience decreased appetite. Combined with poor dental hygiene, this often leads to a tendency to avoid nutrient-rich foods, like vegetables, which require the ability to chew well. Some people may also develop a "sweet tooth" which may put them at greater risk for cavities.

Cognitive impairment, ranging from mild to severe, can sometimes lead to a decline in daily self-care and dental routines. People who experience cognitive changes may be more likely to miss dental appointments and less likely to report dental pain to their care partners or dentist, leaving issues unaddressed for too long.

Early signs to look for if you are worried that your own dental care, or that of a loved one, is declining include infrequent tooth-brushing, difficulties rinsing during daily dental care, poor denture care and trouble sitting through meals.

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## Strategies for Improving Dental Care

The sooner that attention is given to preventive dental care, the better. So what can a person with PD or a care partner do to ensure that Parkinson's disease does not stand in the way of good dental hygiene? Here are a few tips:

### **Maintaining Dental Care at Home**

The simplest intervention is an electric toothbrush, which provides the fine and repetitive motions that protect teeth most effectively. In some people with PD, "one-handed preventive strategies," which allow a person to use the stronger side of his or her body, can also be helpful. For instance, some find that caring for dentures is made easier by attaching a nailbrush to a household surface with a suction cup and then moving the denture back and forth across the brush.

Additionally, prescription strength, topical stannous fluoride gel treatments can be a good preventive strategy, both on a daily basis at home and during periodic visits to the dentist. Stannous fluoride, often used in toothpastes to protect tooth enamel from cavities, is also available as a gel that can be directly applied to the mouth. Since it is much stronger than toothpaste, you should only use the gel as directed by your dentist.

Mouthwashes are discouraged for people with PD because of the risk of choking, but in cases where they are still an option, look for those that are non-alcohol based and that use either chlorhexidine (an antiseptic) or baking soda. One alternative is a chlorhexidine laden brush, available by prescription, that you can apply to your teeth.

### **Improving Dental Visits**

There are several ways to improve visits to the dentist, beginning with strategic timing. For example, plan for early morning visits, when waiting times tend to be shorter. Take levodopa 60 to 90 minutes prior to the office visit to take advantage of a peak response period, which may improve the patient's ability to meet the demands of a dental examination. It may be helpful to plan a series of several, brief office visits rather than fewer, longer visits. As PD progresses, the amount of time during which a person responds optimally to PD

## Tips for Maintaining and Improving Dental Health

- Use an electric toothbrush
- Try "one-handed strategies," which allow you to use the stronger side of your body
- Apply stannous fluoride gel treatments, as directed by your dentist
- Try non-alcohol based mouthwashes using chlorhexidine or baking soda
- Visit your dentist in the morning
- Take levodopa (Sinemet®) 60-90 minutes before your visit
- Plan several, shorter dentist visits, rather than fewer, longer ones

medications will become less and less, so shorter visits may be more realistic and more productive.

### **Considering Medications and Surgery**

As PD progresses, motor symptoms worsen and anxiety may increase, making home dental care and routine dental work more difficult. A neurologist will often be able to help in such situations, weighing the risks of medications with the potential benefit of a dental intervention.

If invasive procedures, such as tooth restoration, are indicated, these should be undertaken as early as possible in the progression of PD, to minimize risk. If general anesthesia is required for a procedure, the patient should be warned that the recovery period for a person with Parkinson's may be prolonged.

### **Conclusion**

These informal suggestions for improving oral health are not comprehensive, but offer a helpful framework for intervention. Thankfully, researchers with multidisciplinary interests are actively investigating links between neurologic and oral health. We hope that their findings will ultimately result in interventions that improve oral health in people living with Parkinson's disease.

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If you have or believe you have Parkinson's disease, then promptly consult a physician and follow your physician's advice. This publication is not a substitute for a physician's diagnosis of Parkinson's disease or for a physician's prescription of drugs, treatment or operations for Parkinson's disease.