

Dental Issues Related to Parkinson's Disease (PD)

By Larry Coffee, DDS

“Parkinson’s Disease can impact the health of the mouth, teeth and jaw and make dental care challenging.... Poorly chewed food can increase the risk of choking and aspiration, which can contribute to life-threatening pneumonia.”

Parkinson’s Foundation

Eating is essential. Healthy teeth help make it safe and easier.

Good nutrition is vitally important. It fuels and sustains life. But Parkinson’s Disease can weaken chewing and swallowing. Chewing can also be impaired by missing, decayed, cracked, “wobbly” teeth, or loose-fitting dentures. While healthy foods can be pureed, it is so much more pleasurable to bite into what we want instead of what our teeth will tolerate. Maintaining dental health with thorough daily oral hygiene and ongoing dental care should therefore be considered an essential part of helping manage PD by reducing the risk of aspiration pneumonia and supporting overall wellbeing.

Medicare generally does not cover routine or complex dental and oral health care, even when such care is essential to the treatment or management of an underlying medical condition (some private Medicare Advantage plans offer limited coverage). The Center for Medicare Advocacy strongly supports adding a comprehensive oral health care benefit to Medicare Part B and expanding coverage for medically necessary oral care, because the mouth is a part of the body and oral health impacts overall health.

The Center encourages Medicare beneficiaries to share their oral health stories and tell elected officials why oral health coverage is important to them. To do so, email the Center at OralHealth@MedicareAdvocacy.org.

Aspiration Pneumonia

Aspiration pneumonia is a serious and potentially deadly complication of Parkinson’s Disease. When chewing and swallowing are compromised, episodes of coughing can occur. That important reflex helps keep food, liquids, and saliva from getting into the lungs. But PD can weaken the coughing reflex, increasing the risk for inhaling parts of inadequately chewed food into the lungs. That can initiate lung infections and inflammation.

Other Infections

Dental cavities and gum disease are preventable bacterial infections. The infections do not resolve on their own. Instead, they usually get progressively worse. The bacteria can also enter the blood stream to infect other parts of the body, and even implanted medical devices, including Deep Brain Stimulation devices. Dental infections and related inflammation can also complicate management of diabetes, cardiovascular, and other diseases experienced by some individuals with PD.

“Dry mouth” and other dental side effects of medications

“Dry mouth” is a common and unpleasant side effect of many medications used to manage PD symptoms, including tremors, stiffness, drooling, incontinence, depression and other mental health challenges. Dry mouth increases the risk of cavities and gum disease since saliva is protective against those dental problems.

Products are available that are specifically formulated to help relieve dry mouth. They are available as rinses, gels, and/or sprays. And chewing xylitol-sweetened gum or sucking on xylitol-sweetened mints can stimulate the salivary glands to make more saliva. (Xylitol is natural sweetener derived from plants. Unlike sugar, it cannot be utilized by bacteria to create cavities. Hence, xylitol is a sugar substitute that helps prevent dental decay).

Some individuals with PD also experience osteoporosis, which increases the risk of fractures from falls. Prolia and Zometa are two drugs in a category of medications called bisphosphonates, which are used to prevent osteoporosis-related fractures. (At higher doses, bisphosphonate drugs are also prescribed for certain metastatic cancers, including breast and prostate). A rare but *serious* complication associated with *ever* having taken such drugs is poor healing and infection of the jawbone following a dental extraction or oral surgery. It is vital to inform your dentist if you have *ever* used bisphosphonates. Importantly, help prevent the possible need for oral surgery by being attentive to conscientious and consistent oral hygiene, and routine dental care.

The value of oral hygiene cannot be overstated, but getting real...

Dental problems can contribute to PD complications. That’s the bad news. The good news is that cavities and gum disease are preventable. They are caused by bacteria that stick to teeth in an invisible film (plaque) that can be removed with *thorough* daily brushing and flossing. The risk of dental problems is significantly reduced with effective oral hygiene. The risk significantly increases with inconsistent and incomplete daily oral hygiene.

But PD tremors involving fingers, hands, and/or the jaw can interfere with brushing and make flossing impractical.

Because oral health and hygiene can improve chewing and reduce the risk of aspiration, the topic is too important to simply offer general suggestions. Your oral hygiene should be carefully and thoughtfully evaluated by a dental professional so adjustments can be considered as appropriate. Think about scheduling a dental appointment just for that purpose. Be empowered with the best chance to prevent dental problems.

Bring your toothbrush, toothpaste, and any other supplies you use to your dental appointments. Let the dental professional observe you cleaning your teeth as you would normally. What you are doing may be perfect. But an *individualized plan* can be developed if modifications are needed to help ensure effectiveness. Should PD symptoms progress and oral hygiene becomes increasingly difficult, schedule another appointment for a new plan. In developing such plans, it may be helpful for the dental professional to collaborate on solutions with your medical and therapy teams. Integrate your dentist into your care team.

As appropriate, possibilities for consideration when developing the plans may include:

- frequency of oral hygiene --- while brushing twice and flossing once daily is generally recommended, one thorough cleaning of all five surfaces of each tooth (cheek side, biting side, tongue side, two side sides) may be adequate since plaque takes about a day to recolonize on teeth after being removed,
- if experiencing “on/off” medication effects, schedule oral hygiene to generally occur during “on” periods,
- enlarge handle of toothbrush to ease grip and/or add a strap to place around your hand to reduce fatigue,
- electric toothbrush (TripleBristle¹ is one with three brush heads that simultaneously cleans the cheek, biting, and tongue surfaces),
- if flossing proves impractical, perhaps try using flexible, textured toothpick-type products such as Opalpix¹ (avoid firm wooden ones),
- fluoride rinse and/or prescription-strength fluoride toothpaste if at high risk for cavities,
- chlorhexidine or other non-alcohol, antimicrobial, mouth rinse (if swishing and spitting a rinse contributes to coughing, apply product to teeth and gums with a toothbrush or disposable sponge swabs such as Toothette¹),
- use of saliva substitute product for dry mouth,
- if food particles tend to remain in the mouth because of weakened swallowing, try swishing and spitting, or wiping around the mouth following meals with a toothbrush or disposable sponge swab,
- training for loved one or aide to assist with brushing and/or flossing,
- frequency of professional cleanings.

Dentures

Stability of dentures improves chewing, which can reduce the risk of choking and aspirating food into the lungs. Moisture in the mouth improves denture stability, especially for upper dentures. “Dry mouth” has the opposite effect. Saliva substitute rinses may help. Dentures can also become unstable if saliva pools in the mouth because of weakened swallowing. If that becomes a chronic problem your dentist may want to confer with your physician about the possibility of medication to reduce saliva production. While denture adhesives may help improve retention, they may make cleaning dentures more difficult. Relines may be recommended by your dentist if weight loss or other changes contribute to poorly fitting dentures.

Dentures should be removed when sleeping to give the tissue under them a chance to relax. That can help prevent development of mouth sores. The dentures should be brushed and placed in water or a denture cleaning solution overnight.

Partial dentures use clasps that fit around certain teeth to improve stability. Bacterial plaque forms on the clasps and can spread to those teeth. If partials are not cleaned daily – and it's best to use a brush specifically designed for cleaning dentures - they can increase the risk of cavities and gum disease. Should that occur, the partial may become dysfunctional.

Dentures can break, so be careful when taking them out or putting them in. Use extra care if PD tremors are an issue. When handling dentures, consider doing so over a soft towel or sink filled with water. If they should slip and drop, the risk of breaking is reduced by buffering the fall.

Dental appointments

Tell your dentist if you have a Deep Brain Stimulation (DBS) device. The dentist may want to consult your neurologist since some dental equipment could interfere with the operation and safety of the DBS system. They may also consider whether an antibiotic should be taken prior to certain dental procedures.

Dental treatment can involve drills and sharp instruments. You don't want to be a moving target because of PD tremors. If swallowing is weakened, treatment involving water sprays may create anxiety. Therefore, *tell your dentist about your preferences to minimize anxiety and help assure safety.*

Appointments should ideally be scheduled for the time of day when you are generally "on" with fewer PD symptoms. That may be an hour or two after taking medications. Long appointments may be fatiguing. If so, ask for shorter ones even if that may require more frequent visits.

How do you want to be seated? You may be more at ease being upright rather than reclined.

Because PD symptoms can become progressively more troublesome, sometimes the sooner that dental issues are fully taken care of, the better. It may minimize the need for more extensive treatment in the future. For instance, it may make sense to replace old dental fillings that are degrading earlier rather than later. Similarly, the fit and function of dentures should be optimized to help promote long-term usability and comfort.

The inherent dignity of every person is reflected through a healthy smile.

¹ Neither the author nor the Center for Medicare Advocacy have any relationship with, or financial interest in the products.