Dental Issues Related to Rheumatic Diseases, Arthritis, and Joint Replacement

By Larry Coffee, DDS

“Many of our patients take medications that suppress their immune systems to control their rheumatologic disease... It is vital for patients to receive appropriate dental evaluation and prompt treatment so they can continue their immune suppressant medications.”

American College of Rheumatology

“Any patient undergoing an arthroplasty of the hip and knee is at risk for infection. These risks are significantly increased in patients with dental disease or poor oral hygiene.... A dental infection is also disastrous in the post-operative patients; prompt, appropriate evaluation of oral infection is critical in patients after surgery.”

American Association of Hip and Knee Surgeons

Medicare generally does not cover routine or complex dental and/or 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 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.

Dental relevance of medications for rheumatological diseases

Rheumatological diseases include Rheumatoid Arthritis, Lupus, Psoriatic Arthritis, Sjogren’s Syndrome, Scleroderma, among others. All are associated with a dysfunctional immune system that attacks healthy tissue. Each of the diseases can affect the lining of joints, as well as connected tendons and ligaments. Some, like Lupus and Scleroderma, can also impact the kidneys and other parts of the body.

Because rheumatological diseases are caused by a “misbehaving” immune system, drugs to subdue it are used to manage symptoms. But since the immune system provides critically important defense against infections, there is an increased possibility for existing infections to get worse and new ones to develop --- especially with higher doses and prolonged use of the medications. Consequently, ads for the drugs frequently advise, “tell your doctor if you have any infections.” Dental cavities and gum diseases are bacterial infections. A suppressed immune system enables the infections to become more severe, and the bacteria to spread with greater
ease, potentially harming other parts of the body. It is therefore particularly important to maintain meticulous oral hygiene and continue routine dental care to avoid dentally related complications.

Dental relevance of “dry mouth” with some rheumatological diseases

Beyond their effect on joints, some inflammatory rheumatological diseases including Scleroderma and Sjogren’s Syndrome (which can occur alone or frequently in association with Rheumatoid Arthritis or Lupus) can also damage tear and saliva producing glands, creating dry eye and dry mouth symptoms. Saliva is protective against dental cavities and gum disease. Reduction in saliva can therefore increase susceptibility to dental problems as well as candidiasis, a fungal infection that can develop inside the mouth creating white patches which can ulcerate and become painful.

To counter the adverse effects of a dry mouth, over-the-counter saliva substitute products are available as rinses, gels, and sprays. Chewing gum and sucking on mints sweetened with xylitol, an ingredient which helps prevent cavities, can stimulate saliva production. Drinking water frequently helps, and impeccable daily oral hygiene is essential. Avoid mouthwashes that contain alcohol. Dental professionals can advise if fluoride rinses or custom trays for fluoride gels are indicated to reduce the risk of cavities, and/or an antimicrobial chlorhexidine rinse to help prevent gum disease.

Osteoarthritis

Osteoarthritis affects joints, but in a different way than Rheumatoid arthritis and other rheumatic diseases. Instead of damage to the lining of joints, osteoarthritis involves destruction of cartilage that normally covers the surface of bones which come together in joints. Think of cartilage as a “shock absorber.” As damage to the protective cartilage increases, bone can begin to grind on bone. The area becomes inflamed, producing pain, swelling, and stiffness.

Over the counter as well as prescription strength NSAIDs (non-steroidal anti-inflammatory drugs such as aspirin, ibuprofen, and naproxen) are generally used to help manage osteoarthritis. A possible side effect can be prolonged bleeding, especially with frequent and long-term use. Dental providers should be advised in such circumstances since some dental procedures can cause bleeding.

Arthritic hands can encumber oral hygiene and handling dentures

Each finger has three joints, and the thumb has two. They can be affected by rheumatic diseases as well as osteoarthritis. The resulting inflammation, swelling, and pain can limit motion and cause weakness. Grasping and holding objects, including a toothbrush, can be difficult. Yet daily brushing and flossing are essential to remove the cavity and gum disease producing bacterial film that forms on teeth.

Dentists can enlarge the handles of regular toothbrushes with the same type of material used in dentures, making it easier to grasp and hold. Physical and occupational therapists are sources of
suggestions for modifying toothbrush handles to ease grip. Electric toothbrushes have larger handles. An electric brush that may make brushing easier is Triple Bristle Sonic Toothbrush. To the best of my knowledge, the design is unique with three brush heads that simultaneously clean the three tooth surfaces that can be reached with a toothbrush (outside or cheek surface, the biting surface, and the inside or tongue surface).

Each tooth has two side surfaces that cannot be reached with a toothbrush. But they need to be cleaned daily to prevent bacterial gum disease and decay. Flossing is the most effective way to clean those surfaces, although soft textured silicone toothpick type products are available. However, since they are small, they may not be practical for people with arthritic hands. If cleaning between teeth is too difficult, dental providers can be asked to instruct a family member or friend how to floss your teeth. Even if impractical for daily flossing, it should be done as often as possible since so many dental problems start and progress between teeth. Dental providers should also be consulted about the possible value of increasing the frequency of professional cleanings if arthritic hands compromise personal oral hygiene.

Holding breakable dentures, and cleaning them at least daily, can be a risky proposition with arthritic hands. Go slow and easy to help prevent dropping them. As a precaution, handle dentures carefully over a soft towel or a sink filled with water. If they drop the towel or water will hopefully provide a soft landing. Some toothbrushes are designed specifically for use with dentures. Many have larger handles. When not being worn (and dentures should be removed during sleeping hours to avoid mouth sores), they should be soaked in denture cleaning solutions.

**Joint replacement**

Artificial joints can become infected, although the risk is quite low. The bacteria can come from dental infections. The risk can be minimized with excellent oral hygiene and regular dental care. That is particularly important for people whose immune system is compromised by disease (e.g., diabetes, HIV), immunosuppressive drugs for rheumatological and other autoimmune diseases, cancer chemotherapies, or post-transplant medications. In such cases the dentist and orthopedic surgeon may want to consult about possibly prescribing antibiotics prior to surgical dental procedures.

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

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