



# ANKYLOSING SPONDYLITIS & DENTISTRY

by Craig Gimbel, DDS

Your visit to the dentist is important to the health of the rest of your body, not just your teeth and gums. It is important to be aware of the effects of spondylitis on the health of your mouth as well as the head and neck areas. At your initial dental appointment it is important to discuss your health history with your dental professional. For example, though ankylosing spondylitis primarily affects the axial spine, other axial parts of the body may be involved, as well, including the mouth. There are secondary effects of drug therapy that may cause dry mouth, infection or jaw bone degeneration. Secondary osteoporosis can even affect the jaw bone and the joint that allows movement of the mandible.

Correlations have been found between poor oral health and systemic disease. For example, there is a link between gum disease and cardiovascular disease and respiratory illness. The body's impaired autoimmune defenses compromise the inflammatory response of oral infection. Be aware that spondyloarthritis is one possible factor that can lead to temporomandibular joint dysfunction, which includes clicking and impaired mouth opening.

## Seated in the Dental Chair

Spondyloarthritis, being an axial and peripheral joint disease, has an effect on the posture and positioning of your head, neck and the rest of the body in the dental chair. Cervical spine stiffness or deformities may make it uncomfortable, or even painful, to sit in the dental chair for extended periods of time. If inflammation of the costovertebral joints of the chest wall occurs, limitation of chest expansion could result. Extraarticular manifestations include fibrosis of the lungs. This would force an individual to maintain respiration by labored diaphragmatic movement, making it more difficult to sit still. Cervical spine involvement may range from slight limitation of neck movement to complete fusion, usually in flexion or bending of the neck.

Fatigue is common among people with ankylosing spondylitis (AS). It is associated with inflammation and pain, in many cases. Your dentist should be made aware of these difficulties at the time of appointment scheduling. There may be a need for shorter appointments or making your dentist or hygienist aware that you must be accommodated with alternating periods of sitting in the dental chair, interrupted by position changing or standing in order to alleviate

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stiffness and pain. Just raise your hand. These requests can be accommodated very easily and will make your visit more comfortable.

Positioning of the head during a dental visit so that there will be proper support and minimal movement is very important. Many dental procedures require pressure or vibration. They range from the use of a dental drill or scaling instrument to that of an extraction surgical instrument that places pressure and subluxation movement on the jaw, head and neck areas.

For all oral surgical procedures, the preoperative workup should include evaluation of cervical bone erosion and ankylosis. In 21 percent of those with ankylosing spondylitis (AS), erosion of the odontoid process (projection from second vertebra of neck around which the first vertebra rotates) and transverse ligament (allows joint flexion) occur which could lead to anterior subluxation (rotation and displacement) of the cervical spine. This is associated with possible morbidity. In such cases, symptoms of occipital pain and tingling can occur due to degrees of spinal cord compression. This is more common in those patients with peripheral joint involvement.

Caution must also be taken to determine if vertebral fracture occurs at C5 - C6 or C6 - C7. Failure to detect fractures could lead to complications during surgery. Extremes of neck extension and flexion should be avoided during positioning of the head and oral cavity as they could lead to spinal cord compression.

This risk of subluxation is especially dangerous during general anesthesia procedures when neck movements are severely restricted and mouth opening is limited due to temporomandibular joint dysfunction. In these cases fiberoptic guided awake nasal intubation should be considered. Placement of a soft cervical collar is a visual reminder of an unstable spine, but does not provide any support in these instances.

## Osteoporosis

Secondary osteoporosis and brittle bone due to spondyloarthritis have an effect on the mouth and surrounding joints. Even the jawbone holding the teeth in position can be affected. Osteoporosis causes osteoclastic bone remodeling and poor bone quality leading to loss of teeth, temporomandibular joint (TMJ) problems or even mandible fracture.

Depending on the degree of osteoporosis activity, rheumatologists and other physicians may prescribe a class of drug known as bisphosphonates, which prevent bone deterioration. These include Fosamax, Actonel, Boniva and Reclast. Even an oral dose of these drugs runs the remote risk of causing an exposed, “unhealing”, crumbling of the bone (osteonecrosis) at the surgical site following removal of a tooth or any bone recontouring procedure. It is extremely important that you advise your dental professional of your use of