

## Case History 2: Mrs K.

A 62-year-old female with a history of osteoporosis and temporomandibular disorder (TMD) seeks dental treatment to address her masticatory concerns. Her occlusion is characterized by a Kennedy Class I situation in the mandible, and a completely restored failing long-span fixed partial denture (FPD) in the maxilla.

### History

#### Chief Complaints

“The left side of my face hurts when I chew. I am unable to chew food and I have to cut everything into small pieces. I would like a full dentition and I am interested in having dental implants to replace my missing teeth. I think I have TMD because my joint hurts when I open my mouth wide, and it gets worse as the day goes on.”

#### Dental History

All missing teeth were lost over 30 years prior due to caries. She has had several FPDs over the years and her current prostheses are 20 years old. The patient indicated that she has sore temporomandibular joints (TMJs), but has never been diagnosed with any specific condition. She brushes 2 to 3 times a day but rarely flosses. A cast removable partial denture was made 10 years ago, but has never been worn. She reports intermittent bouts of facial pain, but prior episodes of pain were on the opposite side (right side).

#### Medical History

Under the care of a physician for osteoarthritis and osteoporosis, and is presently taking alendronate (Fosamax) 10 mg tablets once per day. She has no known drug allergies.

#### Social History

She is an artisan who makes and sells ceramics. She and her husband, a businessman, are quite active socially, and she enjoys a glass of wine daily, but does not smoke.

#### Clinical and Radiographic Findings

- Extraoral examination: within normal limits.
- TMJ examination: unilateral pain on right side, pain is over the joint when mouth is open (left side), crepitation (left side).
- Dentition: see radiograph.

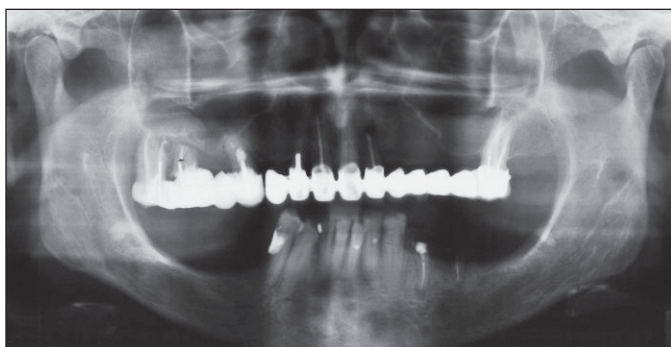
- Periodontal examination: oral hygiene (fair); 5-mm recession (44), no mobility or furcation involvement.
- Occlusion: Angle Class 1, reduced number of centric stops, localized mandibular anterior tooth wear (type I).
- Radiographic examination: Left TMJ—flattening of joint surfaces, sclerosis of part of condyle and articular eminence, osteophyte formation.
- Prostheses: FPDs (FDI tooth nos.): 17-16-X-14 and X-12-11-21-22-X-X-X-27 (all metal-ceramic).

#### Diagnosis

- Inadequate maxillary FPDs characterized by open- and over-contoured margins, fractured porcelain, and mobility of prostheses over abutment teeth.
- Nonphysiologic occlusion characterized by localized mandibular anterior tooth wear (attrition primary etiology), compromised posterior masticatory function from reduced number of posterior tooth contacts.
- TMD with osteoarthritis as main etiology.

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