A 64-year-old woman presented with a history of slow and progressive facial asymmetry since childhood. Physical examination revealed painless right facial enlargement involving the soft tissue and bony structures of the maxilla and mandible (image A). A plain radiograph revealed hazy radiopacities with a ground glass appearance (image B), suggestive of polyostotic fibrous dysplasia (FD). Transoral excisional biopsy revealed fibrous stroma in which spicules of disconnected woven bone were noted, confirming the diagnosis of polyostotic FD. The patient was treated with 70 mg of alendronate once weekly to improve bone density, decrease the diameter of the lesion, and decrease pain scores. At 30-month follow-up, no other complaints were reported, and the craniofacial FD was smaller.

Craniofacial FD masses are almost exclusively unilateral; the maxilla and mandible are most frequently affected followed by the frontal, parietal, and occipital bones. Although approximately 1% of craniofacial FD cases carry a risk of malignant transformation, it typically follows a benign and indolent course of bone malformation. Bisphosphonate therapy may be useful in treating patients for refractory pain. Immediate surgical care may be necessary for patients with rapid growth, new sensory changes, or auditory or visual disturbances.

References