A 46-year-old Caucasian woman of Ashkenazi Jewish descent presented with the chief complaint of severe and constant throbbing pain in her left posterior mandible.
She reported that her pain was aggravated by chewing, and started months before the initial consultation visit.
Visual analog scale of pain was reported 7/10 at the day of the visit.
Past medical history was remarkable for Gaucher disease, left hip replacement, gall bladder removal, herniorrhaphy, spleen abscess drainage, hepatitis C infection, and asthma.
Social history was significant for 20 pack-years of cigarette smoking.
Her family history was unremarkable for any hereditary or systemic diseases.
Her medications included the oral antiresorptive drug alendronate for early osteoporosis associated with Gaucher disease (70mg weekly for 2 years), calcium supplements, loratadine, hydromorphone, esomeprazole, promethazine, levalbuterol, carisoprodol, fluticasone and ibuprofen.
She reported that she had been on enzyme replacement therapy (ERT) intermittently for several years to treat her Gaucher disease which was diagnosed 20 years prior.
She received intravenous injections twice a month for ERT and recounted fatigue after each infusion.
She also reported receiving antibiotic and analgesic medications for her pain months ago but they were not helpful.Head and neck examination, cranial nerve examination and vital signs were within normal limits.
Intraoral examination was completed using percussion testing, vitality testing and probing for evaluation of her mandibular posterior teeth in the region of the chief complaint.
Her left mandibular first molar was endodontically treated 3 years prior and tested non-vital, while her remaining mandibular teeth were normal on vitality testing with evaluation of several opposing non-restored and non-carious teeth as internal controls.
Gingival tissues in both jaws were non-inflamed and there was no gross evidence of plaque or calculus.
Periodontal pockets in her mandible ranged from 4 to 6mm with no significant bony defects.
Full mouth dental X-rays and a panoramic radiograph were taken and showed relatively well-defined radiolucent lesions in multiple regions of the mandible bilaterally, with a pseudocystic (multilocular) appearance; cone-beam computed tomography confirmed these findings and revealed a large lytic lesion of her left posterior mandible in the region of her chief complaint (Figure 1).Our clinical and radiographic differential diagnosis for her chief complaint included chronic apical periodontitis, radicular cyst, central giant cell granuloma, keratocystic odontogenic tumor, ameloblastoma, odontogenic fibroma, neuralgia/neuropathy or mandibular involvement of Gaucher disease given her medical history.
Our findings were discussed with the patient and written consent was obtained for surgical biopsy of her left mandible with local anesthesia for more definitive diagnosis.
A four-corner gingival flap buccally was reflected in her posterior left mandible extending from the canine to the second molar, and cortical bone was removed with a surgical bur to create a window for access to the lesion.
Pathologic soft tissue was evident through the access window.
The entire pathologic soft tissue along with the bone from the access window was submitted to the pathology laboratory for histological evaluation.
Histopathological findings revealed infiltration of jawbone marrow with fibrous connective tissue containing abundant Gaucher cells (Figure 2).
There was no evidence of abscess or neutrophils, granuloma or malignancy.
Postoperative healing was uneventful, and the patient reported resolution of her chief complaint and symptomatology at 1-month follow-up.
She was referred to her physician for consultation and further evaluation as related to her Gaucher disease status following our findings.
She was again treated with ERT and at 1-year re-evaluation was still symptom free in her oral cavity.