
OBJECTIVE: The aim of this study was to describe a new case series of peri-implant malignancy, review the literature, and discuss the implications of malignancies resembling peri-implantitis. STUDY DESIGN: This study was a retrospective analysis of cases from 2000 to 2016. RESULTS: Seven patients (two males and five females), aged 44 to 89 years, were included, representing 1.5% of oral malignancy cases. Five cases were squamous carcinoma, one of basal cell carcinoma, and one of carcinoma of metastatic origin. Six cases presented with nonulcerated overgrowth, with bone loss in three and massive osteolysis in one. Misinterpretation as peri-implantitis delayed diagnosis in six cases. Risk factors included previous oral malignancy (2), potentially malignant conditions (2), and smoking (1). Of the 47 cases in the English language literature, 85% were squamous cell carcinoma and 8.5% had distant metastasis. Most cases had one or more risk factors. CONCLUSIONS: Peri-implant malignancy may represent up to 1.5% of oral malignancy cases. Clinical features imitating peri-implantitis may delay diagnosis. Lesions failing to respond to treatment, especially in patients with pre-existing risk factors, should significantly increase suspicion. Histopathology is crucial for diagnosis.