Background: Stafne bone cavities (SBCs) are typically seen on panoramic radiographs as unilocular, rounded or ovoid shaped, well-defined corticated radiolucencies that are localized between the mandibular first molar and the angle of the mandible below the inferior alveolar canal, but they may also have different radiographic appearances and locations rarely. Objectives: The purpose of this study was to evaluate the imaging features of SBC presenting various cases which have typical and atypical features and to show the contribution of different imaging techniques to diagnosis. Methods: Seventeen patients who had a panoramic radiograph that revealed an image compatible with SBC were investigated in this study. In addition to panoramic radiography, lateral oblique mandible projection for three patients, cone beam computed tomography (CBCT) for nine patients, magnetic resonance imaging (MRI) for two patients were performed to determine the exact location of the cavity and to confirm the diagnosis. Results: Seventeen patients were diagnosed with SBC. Two patients had bilobed SBC, one patient had SBC on the buccal surface of the posterior mandible, one patient had SBC located in the ramus mandible, one patient had SBC located in the canin-premolar region namely anterior lingual variant as rare conditions. Conclusions: Imaging techniques such as CBCT and MRI have provided detailed information about definitive diagnosis of SBC in addition to panoramic radiographs. These techniques show the size, location and content of the SBC. If the SBC is atypical, complementary imaging techniques gain more importance.