Purpose: To analyze the computed tomography (CT) features and the reasons for misdiagnosis of parotid tuberculosis (TB). Methods: CT features of 13 cases of parotid TB identified more than a 10-year period (2005–2015) were retrospectively analyzed. The CT features were analyzed for nature, range, and extent of the various pathological patterns. Results: Because of the nonspecific CT features, 10 of 13 cases were misdiagnosed as benign and malignant tumors of parotid gland and received surgery. Ten cases of lymph nodal TB, one case of parenchymal TB, and two cases of mixed (concurrence of lymph nodal and parenchymal types) TB were found in the parotid gland. On contrast-enhanced CT scan, two cases showed homogeneous enhancement and eight cases showed ring enhancement (including five cases with thin-walled ring enhancement, two cases with flower-ring enhancement, and one case with thick-walled and eccentric ring enhancement); diffuse enhancement was seen in the one case of parenchymal type; the two cases of mixed type showed diffuse enhancement of parotid gland and ring enhancement of lymph node. Thickened skin around the parotid gland was seen in eight cases, including sinus tract between the lesion and skin in two cases. Ipsilateral cervical lymphadenopathy was found in 10 patients and bilateral was found in 3 patients. Conclusions: Nonspecific CT features of parotid TB closely relate with pathological changes. Recognition and understanding the spectrum of CT features of parotid TB is helpful for differential diagnosis, but the definitive diagnosis still depends on laboratory and pathological examination.

Shambhu Kumar Sah
Janakpur Zonal Hospital, Nepal

mrsks2007@hotmail.com