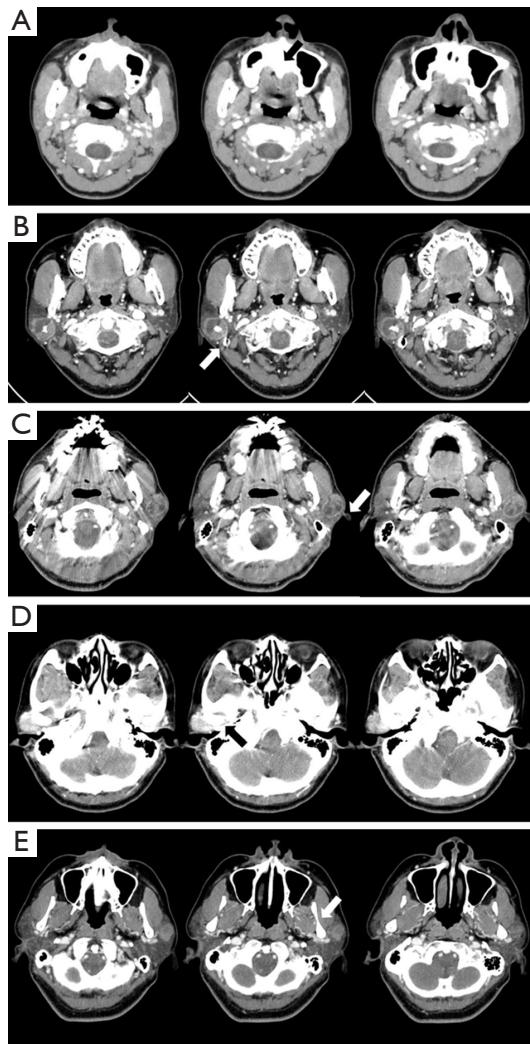


## Supplementary

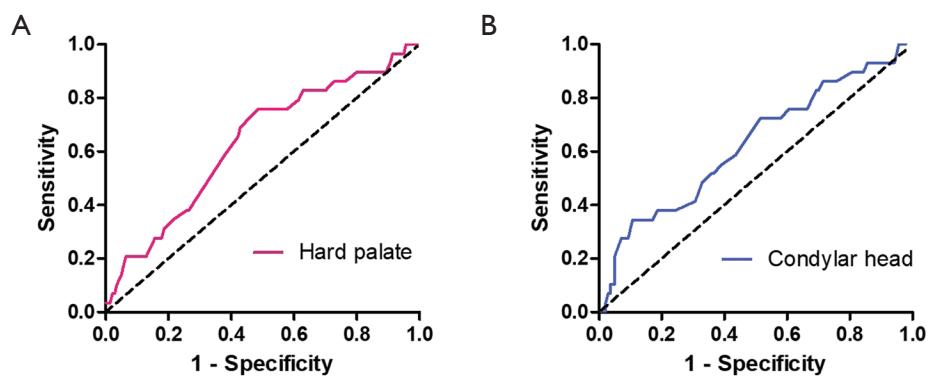
**Table S1** Size and level difference from reference point for each diagnostic group.

	Types	n	Size (mm)	Hard palate	Mastoid tip	Ear lobe	Condylar head	Mandible notch
Benign Malignant	Pleomorphic Adenoma	96	23.2±7.7	19.3±19.0	14.6±16.0	9.2±16.0	46.2±22.2	28.9±18.8
	Warthin's tumor	35	29.0±11.3	52.6±21.0	35.5±18.1	29.9±18.5	75.8±22.2	56.9±24.5
	Other benign	9	20.7±8.3	25.6±15.0	14.3±16.2	8.1±17.7	55.1±19.6	33.2±13.8
	MEC	16	26.3±12.3	19.3±24.0	19.0±21.5	12.4±23.1	45.9±25.5	31.8±22.1
	Other malignant	13	28.5±14.7	13.9±25.8	6.7±18.5	0.2±18.9	41.5±24.4	25.8±25.6
P	One-way ANOVA		.013	< .001	< .001	< .001	< .001	< .001

Abbreviations: MEC, mucoepidermoid carcinoma.



**Figure S1** Computed tomography presentation consecutive images of five reference points. (A) Superior surface of hard palate (black arrow). (B) Inferior end of mastoid tip (white arrow). (C) Inferior end of earlobe (white arrow). (D) Center of condylar head (black arrow). (E) Mandibular notch (white arrow).



**Figure S2** ROC curve analysis from two significant reference point. (A) Superior surface of hard palate (AUC =0.633, P=0.025). (B) Center of condylar head (AUC =0.625, P=0.034).