**Fig. S3. Evaluation of cholesteatoma volume on CT-MRI fusion.** (A) Axial CT and T2-weighted MRI image stacks are fused for alignment. (B) Diffusion-weighted (DW) MRI shows foci of high intensity in the same plane. (C) The CT-DW MRI fusion demonstrates a focus of hyperintensity in the epitympanum and mastoid cavity, suggestive of cholesteatoma. The lateroposterior focus with low signal intensity (yellow arrowhead) is granulation tissues, which was consistent with surgical findings. (D) The cholesteatoma is manually segmented with a modification based on surgical findings and the volume is measured.