



Supplementary Fig. 1. Virtual operation procedure scene using virtual simulator platform software. A: An endoscopic view after a virtual operation involving MMA+IMA is shown. The green dots on the axial, sagittal, and coronal images of CT represent the site of the end of the drill that is placed in the endoscopic view. The drill is placed near the IMA site. B: An endoscopic view after a virtual operation involving MEGA is shown. The green dots on the axial, sagittal, and coronal images of CT represent the site of the end of the drill that is placed in the endoscopic view. The drill is placed near the partial inferior turbinectomy site. The endoscopic view is more widely enlarged. C: The endoscopic view after a virtual operation involving EMM is shown. The green dots on the axial, sagittal, and coronal images of CT represent the site of the end of the drill that is placed in the endoscopic view. The drill is placed almost in the maxillary sinus. MMA, middle meatal antrostomy; IMA, inferior meatal antrostomy; CT, computed tomography; MEGA, mega-antrostomy; EMM, endoscopic medial maxillectomy.