

Table 1. Characteristics of Included Studies

Study ID	Design	Participants	Intervention	Control	Procedures	Device
Chang 2021	Parallel RCT	Adults (18-85)	Passive Virtual Reality VR by Coresights platform. Patients were immersed in a relaxing virtual environment on a beach with the sound of waves crashing onto a shore playing during the experience + standard local anesthesia	<ul style="list-style-type: none"> • 4 mL of 4% lidocaine applied directly onto the vocal folds through a channeled laryngoscope for laser ablation, vocal fold biopsy and BOTOX injections. • 4 mL of 4% lidocaine via a transthyroid approach in the injection laryngoplasty procedures • 4 mL of 4% lidocaine via a cricothyroid approach in the intralesional steroid injection procedures 	<ul style="list-style-type: none"> • Vocal fold injection • Injection laryngoplasty • Intralesional steroid injection for airway stenosis • Vocal fold biopsy Laser ablation of vocal cord lesions	Samsung Gear VR goggles with a Galaxy S9 smartphone connected via micro-USB port to provide audiovisual content.
Gray 2021	Cross-over RCT	Adults (18-65)	Active Virtual Reality - Space Burgers™ (JunoVR) game + standard local anesthesia	Topical analgesia (2 atomizer sprays, nasal phenylephrine (Neo-Synephrine) and lidocaine)	Nasal endoscopy and debridement after FESS or endoscopic endonasal skull base surgery	Oculus Go VR goggles and a hand-held controller
Liy 2021	Parallel RCT	Children (0-17)	Active Virtual Reality - Space Burgers™ (JunoVR) game + standard local anesthesia	Standard topical analgesia (4% lidocaine spray and nasal Neo-Synephrine)	Flexible or rigid endoscopy	Oculus Go VR goggles and a hand-held controller

VR= Virtual Reality. FESS=Functional Endoscopic Sinus Surgery. RCT= Randomized Controlled Trial.