A 20-YEAR-OLD MAN PRESENTED WITH A 6-YEAR HISTORY OF POPPING sounds in both ears when he breathed deeply. Aural fullness and autophony of the voice and breathing sounds were also described. Pure-tone audiometry showed normal hearing. Otoscopy showed indrawn and severely atrophic eardrums that moved outward on regular nasal expiration and inward on regular nasal inspiration. The inflation and collapse of each hypermobile eardrum was marked on forced nasal breathing (Figure and Video). We diagnosed patulous eustachian tubes, which involve abnormal patency of the eustachian tubes that readily permits the flow of air to and from the nasopharynx into the cleft of the middle ear. Risk factors for patulous eustachian tubes may include rapid weight loss, mucosal atrophy or scarring, muscular dysfunction, and high estrogen levels. The patient reported having recurrent otitis media since childhood, which prompted myringotomy on three occasions. After presentation, he underwent myringotomy with grommet insertion and had complete resolution of symptoms. There was no significant difference in hearing level after the procedure, and he remained asymptomatic at follow-up 10 months after treatment.

Patulous Eustachian Tube Causing Hypermobile Eardrums

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