



## Letter to Colleagues in Reference to: “Eustachian Tube Dysfunction: Consensus Statement on Definition, Types, Clinical Presentation and Diagnosis”

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### Abstract

After reading the editorial comment article entitled, “Eustachian tube dysfunction: Consensus statement on definition, types, clinical presentation and diagnosis” published in *Clinical Otolaryngology* (2015; 40 (5): 407-411), I would like to congratulate the authors for their successful consensus, and I wish to make some contributions to the discussion.

### Introduction

In the editorial comment article, Alternobaric Vertigo (ABV) was left off the consensus statement, even though baro-challenge-induced Eustachian Tube Dysfunction (ETD) was mentioned. I believe ABV deserves wider recognition, even in 2021. ABV was first defined by Dr. Lundgren in 1965 to describe vertigo in deep-sea divers [1]. It is also used to describe vertigo experienced by aviators [2]. In both instances, ABV is defined as dizziness which occurs as a result of asymmetrical middle ear pressures [3]. The definition is practical because it is often unfeasible to clearly distinguish between unilateral ETD and bilateral ETD.

In 1942, Dr. Merica declared that vertigo caused by Eustachian tube obstruction is a distinct clinical entity and mentioned that it is caused in most (and perhaps all) instances by unilateral Eustachian tube obstruction, or by more complete obstruction one side than the other [4]. Eustachian tube obstruction may cause unilateral or bilateral vestibulopathy. The patient-reported Eustachian Tube Dysfunction Questionnaire (ETDQ-7) [5] system for quantitative ETD-related symptoms assessment omits vertigo, so it does not provide the crucial information needed to assess ETD. Merica also mentions that cases of insidious ABV onset are most likely to be overlooked because gastrointestinal symptoms are predominant [4]. One of the most important reasons for assessing Eustachian tube function is the need to make a differential diagnosis in patients with intact tympanic membrane without evidence of otitis media, but with symptoms potentially related to ETD (including vertigo) [3]. In

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a review article, Mallen and Roberts conclude that ABV should be differentiated from peripheral causes such as Menière’s disease, benign paroxysmal positional vertigo, and vertebro-genic dizziness, as well as central disorders [6,7].

In 2012, Dr. Bluestone observed that persistent ABV at ground level is associated with abnormal vestibular function test results. He demonstrated that normalizing bilateral middle ear pressure returns vestibular function to normal which completely resolves vertigo [3]. Vestibular organs are always affected by middle ear pressure which makes them dependent variable organs. In fact, the condition can often be completely resolved by Eustachian tube catheterization [3,4].

Alternobaric vertigo and Eustachian tube catheterization have been known to otologists since 1942, and the fact that Eustachian tube catheterization is a safe and reliable treatment option for ABV is undisputed [4]. The ETD consensus statement is considered to be the principal authority on the journal of *Clinical Otolaryngology* was published only recently. Alternobaric vertigo and Eustachian tube catheterization were overlooked in the consensus statement without explanation-it seems to me, that the omission requires some kinds of justification.

I would like to propose that ABV be included in the ETD Consensus Statement as an official symptom of ETD, and that Eustachian tube catheterization also is recommended as a method for diagnosis and management of ETD.

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### Conflicts of interest

The author declares that there is no conflict of interest to disclose.

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Top