Simultaneous Presentation of Benign Paroxysmal Positional Vertigo and Meniere's Disease

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- Benign paroxysmal positional vertigo (BPPV) is one of the most common clinical entities, which develops spontaneously in most of the cases.

- Benign paroxysmal positional vertigo (BPPV) is a common type of vertigo associated with the ears. Most cases of BPPV have an unknown cause. Vertigo from BPPV occurs with specific movements of the head such as lying down, turning the head a certain direction or hanging the head upside down

- It is considered that pathophysiological mechanisms that cause positional vertigo are detached otoconia floating inside the semicircular canals (canalithiasis) or otoconia adhering to the cupula, most often in the posterior semicircular canal (cupulolithiasis).Although its pathogenesis is still not yet elucidated, in general, it is assumed that it develops spontaneously in 85% of cases as a result of degeneration of utricular neuroepithelium .In 25% of cases, BPPV can be associated with other different conditions in the inner ear that might cause otoconia detachment or secondary BPPV

- BPPV attacks may be related to head trauma, a prolonged recumbent position, and various pathological processes such as inflammation of the inner ears. According to previous studies, the presence of a systemic disease, including hypertension, diabetes, high cholesterol, cerebrovascular diseases, and autoimmune diseases such as allergies and thyroid autoimmunity, may worsen the status of the posterior labyrinth, causing a more frequent otolith detachment and, in turn, BPPV ,However, in most BPPV cases, the etiology is idiopathic.

- Benign paroxysmal positional vertigo (BPPV can be easily treated, but unfortunately in many cases, it is not recognized by the doctors .The annual incidence of BPPV ranges from 0.06 to 0.6%, and its prevalence increases proportionally with the age of patients .

- BPPV is largely underdiagnosed, while Menière’s disease, which is about 10 times less frequent than BPPV, appears to be overdiagnosed.

- Is there a relationship between BPPV and Meniere's disease?

- No. Although both disorders are associated with vertigo, they are not usually related. However, it is possible to have both disorders at the same time. Vertigo is intense dizziness and the feeling that you are spinning or your head is spinning.

- According to Taura et al., about one-third of patients with Meniere’s disease developed benign paroxysmal positional vertigo (BPPV)-like attacks . Thus, vertigo attacks in patients with Meniere’s disease must be carefully treated because the therapy for such vertigo attacks is different from the therapy for BPPV.

- The latest studies have indicated the possible coexistence of these two conditions in the inner ear and suggest their interaction .BPPV, along with MD, was mostly observed in the ear affected by hydrops in females and patients with more advanced disease. Canalolithiasis of the horizontal semicircular canal was more common in patients with BPPV associated with MD than in idiopathic BPPV. BPPV in MD was more prone to recurrence and required more canal repositioning manoeuvres .

- Can stress bring on Meniere's disease?

- Certain stresses and emotional disturbances can trigger episodes of Ménière's symptoms, including working for too long, underlying health conditions, and tiredness.

- Can BPPV be caused by stess?

- After adjustment for age, sex, and comorbidities, patients with anxiety disorders were found to be 2.17 times more likely to develop BPPV than the control patients.

- Elevated levels of stress hormones including cortisol can negatively impact the transmission of neural information from your vestibular system to your brain. It’s thought that these hormones may disrupt ion channels in your nerves and neurotransmission in your brain.
- Your body also releases other chemicals including histamine and neurosteroids when you’re stressed that may indirectly impair neurotransmission between your vestibular system and your brain.

- The aim of presenting this case is to point out to the need of taking a precise clinical history and performing Dix-Hallpike manoeuvre in all patients who complain about vertigo regardless of the previously diagnosed primary disease of the inner ear.