

mal subjects: 50, sd 10, values < 50 are conspicuous) a similar pattern was found. Lowest values were found for PSP (32.3), DBN (34.6) and CA (35.7). Patients with vestibular disorders were less restricted (BPPV 39.4, MD 41.2, VP 40.8, PSY 38.9, VM 39.4).

Conclusions: Among all patients presenting to a tertiary care clinic for vertigo and balance disorders, patients with neurodegenerative disorders are most severely affected by their symptoms. Remarkably, in most of these patients the chief complaint is vertigo and dizziness and the underlying diagnosis has not been established before. In comparison, classical vestibular disorders are less affected in the chronic stage of the disorder. These results show that there is a need to include neurodegeneration into the differential diagnosis of dizzy patients and that the subjective dizziness in these patients might be more severe than in vestibular disorders.

P-A-7

SOCIODEMOGRAPHIC AND CLINICAL CHARACTERISTICS OF PATIENTS WITH VERTIGO AT CLÍNICA OCCIDENTE DE OTORRINOLARINGOLOGÍA, MEDELLÍN, COLOMBIA: A DESCRIPTIVE STUDY

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Introduction: Vertigo and dizziness account for an estimated 20 to 30 percent of primary care clinic visits, and it is even more common among older adults. To date, there are few papers published about clinical characteristics of individuals with balance disorders. In Colombia there is no data about this issue. A good anamnesis and physical examination can be done in most of the cases, which are mandatory aspects to achieve a successful diagnosis and treatment of this disorder.

Objetives: To describe the sociodemographic and clinical characteristics in outpatients with vertigo at Clínica Occidente de Otorrinolaringología (Medellín, Colombia) between October of 2010 and March of 2013.

Methods: Clinical charts of the patients older than 18 with vertigo and balance disorders were reviewed in an attempt to determine several variables including sex, age, clinical characteristics and symptoms improvement.

Results: One hundred and thirty-four patients were included. The mean age was 57.43 years. Most patients

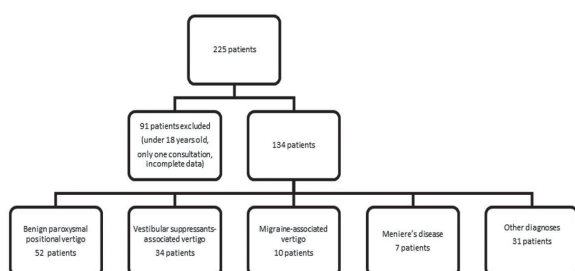
were female (76.9%). The most common complaints were vertigo (85.8%), balance disorders (67.8%) and head fullness sensation (46.3%). The median time between onset and first consultation was 36 months (P25: 6, P75: 120). Fifty-three percent of the patients used vestibular suppressants more than three months before the first consultation, and 81.3% used them less than three months before. The definitive diagnoses were benign paroxysmal positional vertigo (38.8%), vestibular suppressants-associated vertigo (25.4%), migraine-associated vertigo (7.5%), Meniere's disease (5.2%), and other disorders (23.1%). All vestibular suppressant drugs were discontinued in 71.6% of the cases. In more than 60% of the cases, a concordance between the first consultation diagnosis and definitive diagnosis was found. Clinical improvement was achieved in 56.7% of the cases with an increasing successful rate (69.18%) at the end of the treatment.

Conclusions: Vertigo is more common in female patients regardless of cause. The most frequent diagnoses were benign paroxysmal positional vertigo and vestibular suppressants-associated vertigo. In the last one the more common symptom was the balance disorder in contrast to all other diagnoses in which vertigo was the predominant symptom. All patients in this study had chronic progression of symptoms, and most of them were using vestibular suppressants at the time of the first consultation. This finding implies that drugs to treat vertigo are being taken indiscriminately, which affects the diagnosis, control and improvement of the patients. Further studies are needed to assess the outcomes indicators in vertigo.

Sociodemographic and clinical characteristics

		Benign paroxysmal positional vertigo	Vestibular suppressants-associated vertigo	Migraine-associated vertigo	Meniere's disease
Age (years)	Mean	62	58	49	43
	SD	17	15	13	16
Sex (%)	Female	45 (87%)	27 (79%)	9 (90%)	4 (57%)
Time between onset and first consultation (months)	Median	42	36	13	120
	Percentile 25	5.2	12	3.2	6
	Percentile 75	174	78	117	324
Vertigo		49 (94%)	26 (76%)	8 (80%)	7 (100%)
Balance disorders		27 (52%)	31 (91%)	6 (60%)	3 (43%)
Head fullness		19 (37%)	21 (62%)	5 (50%)	1 (14%)
Hearing loss		6 (12%)	3 (9%)	2 (20%)	2 (29%)
Tinnitus		12 (23%)	14 (41%)	4 (40%)	5 (71%)
Headache		13 (25%)	12 (35%)	7 (70%)	2 (29%)
Vestibular suppressants more than three months before the first consultation		25 (48%)	21 (62%)	6 (60%)	4 (57%)
Vestibular suppressants less than three months before the first consultation		43 (83%)	34 (100%)	5 (50%)	6 (86%)
Concordance between the first consultation diagnosis and definitive diagnosis (%)		70.59%	75%	80%	62.5%
Clinical improvement at the end of the treatment (%)		84%	66%	72%	67%

Key words: Vertigo. Dizziness. Balance disorders. Vestibular suppressants. Benign paroxysmal positional vertigo. Migraine-associated vertigo. Meniere's disease.



P-A-8 GENDER AND PERIPHERAL NEUROPATHY ON THE POSTURAL STABILITY OF PATIENTS WITH TYPE 2 DIABETES MELLITUS

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Aim: To assess the interaction between gender and peripheral neuropathy on the postural stability of patients with type 2 diabetes mellitus.

Methods: 150 patients with type 2 diabetes mellitus gave their informed consent to participate in the study. They were aged 30 to 80 years (57 ± 9.7 , mean \pm S.D.) and 106 (70%) were females. They had no history of otology, neurology, orthopaedic or balance disorders. After a clinical interview and neuropathy assessment with electromyography, postural stability was evaluated by static posturography (eyes open/closed on hard/soft surface) and the "Up & Go" test. Statistical analysis was performed using "t" test, linear correlation and multivariate analysis of covariance; the significance level was set at 0.05.

Results: During static posturography, on soft surface, the length of sway was consistently related to age, gender and the evidence of peripheral neuropathy (multiple $R = 0.6$, $p < 0.001$), the influence of neuropathy was larger in males than in females, and closing the eyes increased further the difference between genders (MANCOVA, $p < 0.02$); on hard surface, the length of sway was consistently related to age, body mass index, gender and the evidence of peripheral neuropathy (multiple $R = 0.5$, $p < 0.001$), with no significant interactions. The mean time to perform the "Up & Go" test was 11.7 ± 2.2 sec, which was related to age (Pearson's $R = 0.34$, $p < 0.001$), with no influence of peripheral neuropathy, the gender or the body mass index,

Conclusión: In patients with type 2 diabetes mellitus with no history of balance disorders, in order to preserve the static control of upright posture, male patients may be more vulnerable than females during conditions with sensory deficit.

P-A-9 INFLUENCE OF THE BODY MASS INDEX ON THE OCCURRENCE OF FALLS IN PATIENTS WITH TYPE 2 DIABETES MELLITUS

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Introduction: Obesity is one of the main factors related to type 2 diabetes mellitus. Compared to non-obese subjects, the postural stability of obese subjects may be more vulnerable.

Aim: To assess the influence of the body mass index on the occurrence of falls in patients with type 2 diabetes mellitus, receiving primary health care, with no history of sensory dysfunction apart from corrected refraction errors.

Methods: 134 patients with type 2 diabetes mellitus gave their informed consent to participate in the study. They were aged 57.4 ± 9.4 years (mean \pm S.D.) (69.4% were females). None of them were seeking medical care due to sensory or balance decline or had history of otology, neurology, psychiatry or orthopaedic disorders, or postural hypotension. Their mean body mass index (BMI) was 29.2 ± 4.9 and 63.4% (95% C.I. 54.9%–71.5%) had HbA1c $> 7\%$. After a clinical interview, patients replied to a self-administered questionnaire of symptoms related to balance, their sensory function was assessed, and they performed the Up & Go test. The occurrence of falls, during the previous 6 months and during a follow up of 6 months, was assessed according to the definition of the World Health Organization. After the follow up, patients were classified in 2 groups, according to the occurrence of falls during the preceding year: I. no falls ($N = 91$), and II. at least one fall ($N = 43$). Statistical analysis was performed using "t" test for means, "t" test for proportions, chi square, multiple regression analysis and analysis of covariance, the significance level was set at 0.05.

Results: Compared to group I, the proportion of women and the proportion of patients with HbA1c $> 7\%$ was higher in group II, as it was the mean BMI