Women with obstructive sleep apnea (OSA): Which are the gender differences?

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Objectives: Diagnostic tools created for classification, management and prognosis of Obstructive Sleep Apnea (OSA), have traditionally been based in a population with a clear male predominance. It is our aim to study retrospectively our data and find if there are gender differences in our sample, both in symptoms and comorbidities. **Methodology:** A retrospective study of symptoms and comorbidities of adult patients diagnosed with OSA obtained between 2014 and 2017 in a sleep medicine centre. Comparison of gender differences for socio-demographic, clinical and polysomnographic data through statistical analysis using the software, SPSS v.24, statistical difference was assumed for values 55 years), statistical significant differences were found between the groups in regards to AHI. Furthermore, there was a statistical significant difference after comparing AHI between genders ($p<.001$), with an average AHI of 19.0/h for women and 29.0/h for men. This difference was maintained after comparison of AHI for all cases above 55 years of age ($p<.01$). Regarding clinical symptoms, only headache ($p<.005$) was statistically significant between both groups, with a clear female predominance. Meanwhile, there were no gender differences in complaints of reflux, snoring, fatigue and dry mouth. Considering comorbidities, there was a statistical difference between genders, regarding the presence of depression and diabetes: 55% of women with OSA had depression ($p<.005$), while only 21% of women with OSA had diabetes ($p<.05$); for men the values were respectively 45% and 89%. A lower percentage of women had dyslipidemia and hypertension, this numerical difference was not statistically significant in comparison to men. Both women and men were overweight, with a BMI of 27.5 and 29.3 ($p<.01$), respectively. There was also a statistical difference in BMI between the pre, peri and postmenopausal women. However, after comparing women with men of the same age (>55 years), BMI was no longer statistically significantly different. **Conclusions:** In women, OSA presents later in life, with more complaints of headaches. Both genders complain equally of dry mouth, reflux, snoring and fatigue. Regarding comorbidities, women have more depression, while men have a higher prevalence of diabetes, both groups have hypertension and dyslipidemia. As a whole, women tend to have lower BMI and AHI. Regarding headache, depression, BMI and AHI, the research results are in accordance with the published literature.

Gender differences in a young population of patients with OSA - 2 years analysis

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Introduction: Obstructive sleep apnea (OSA) is characterized by abnormal collapsibility of the upper airway inducing obstructions that result in snoring, hypopneas and apneas. The importance of OSA is well recognized, along with a number of significant gender-related differences in the symptoms, diagnosis, consequences and treatment of OSA. **Objectives:** To compare the frequency of symptoms, anthropometric and polysomnographic data between men and women with a diagnosis of Obstructive Sleep Apnea (OSA) followed in a Sleep Unit. **Methods:** Retrospective analysis which included all men and women with OSA aged 30 to 50 years diagnosed with conventional polysomnography (PSG) in our sleep unit during the year 2015 and 2016. Clinical data including OSA related symptoms, anthropometric data and PSG parameters were considered. **Results:** 189 patients were included (72% men), with a mean age, Body Mass Index (BMI) and Respiratory Distress Index (RDI) of 43.5±5.4 years, 30.1±5.1 and 21.1±19.7, respectively. BMI in women was higher than in men (31.4kg/m² vs 29.5kg/m², p=0.026). Symptoms referred by the patients were different between genders, with men having more frequent witnessed sleep apnea (67.2% vs. 47.1%, $p=0.017$) while women experienced more insomnia (53.1% vs. 29.2%, $p=0.005$), depression (42% vs. 8.5%, $p<0.001$), disturbed unrefreshing sleep (79.2% vs. 57.8%, $p=0.026$) and morning headache (51% vs. 26.9%, $p=0.004$). With regard to polysomnographic parameters, men had higher mean values of RDI (23 vs. 15.9, $p=0.009$), supine RDI (37.9 vs. 21.4, $p<0.001$), obstructive apnea index (3.4 vs 0.9, $p<0.001$), obstructive hypopnea index (14.1 vs. 8.7, $p=0.001$) while women had higher Respiratory Effort Related Arousals (RERA, 5.7 vs 4.6, $p=0.011$). **Conclusions:** Statistical significant differences between genders in both clinical and polysomnographic parameters were identified. Insomnia, depression, disturbed unrefreshing sleep, morning headache and higher Respiratory Effort Related Arousals index were noted in women. Men has more frequent witnessed sleep apnea as well as higher apnea, hypopnea and total RDI values.

Phenotyping OSA - Demographic and polysomnographic predictors of non-desaturating OSA

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Introduction: In a subgroup of obstructive sleep apnea (OSA) patients, respiratory events are associated with arousals without oxygen desaturation. The clinical and polysomnographic characteristics and significance of this group is presently not known. We aimed at comparing the desaturating (D)

and non-desaturating (ND) phenotype in terms of clinical characteristics and sleep stage distribution of respiratory events. **Methods:** From 736 polysomnography's (PSG) performed in 2010-2017 patients with respiratory disturbance index (RDI)≥15 or RDI≥10 plus clinical suspicion of OSA were selected. Exclusion criteria included <30min of REM sleep and artifacts on either flow or oxygen saturation >10min were excluded. ND phenotype was defined as oxygen desaturation index (ODI) <5 and D phenotype as ODI≥5. REM-predominant OSA (REM-OSA) was defined as REM-RDI/NREM-RDI>2. Comparisons between groups of D and ND used Mann-Whitney, Chi-squared, or Fisher exact test, as appropriate. Multivariate analysis was performed using binary logistic regression. **Results:** We obtained a total of 308 patients (35.4% of women, mean age 55.6±14.8 years, mean BMI 28.9±4.5kg/m²). Mean RDI was 27.1±16.2 and was significantly lower in women (23.5±12.7 vs. 29.1±17.5; *p*=0,004). There were 64 ND patients (20,8%). Group ND had significantly more women (47% vs. 33%; *p*=0,031), was younger (47.1±15.0 vs. 57.9±13.9; *p*=0,000) and had lower BMI (27.3±3.6 vs. 29.1±4.6; *p*=0,016) than group D. As expected, group ND had significantly less severe OSA as assessed by the RDI (15.4±4.5 vs. 30.2±16.7; *p*=0,000). RDI was higher during REM in 42% of ND vs. 63% of D (*p*=0.002). Since no ND patients had RDI≥30, we analyzed REM-OSA only in patients with RDI<30 (N=64 ND; 153 D). In this subgroup, REM-OSA was present in 36% of D patients, but only in 14% ND (*p*=0.001). In multivariate analysis lower RDI (OR 1.260 95% CI 1.168-1.358), younger age (OR 1.035 95% CI 1.011-1.059), and not having REM-RDI (OR 3.783 95% CI 1.577-9.073) were significant predictors of ND outcome. Female gender (OR 1.092 95% CI 0.681-4.012) and lower BMI (OR 1.092 95% CI 0.989-1.206) did not reach statistical significance. **Discussion:** The ND phenotype is less common. Younger patients with milder OSA are more likely to present with either a ND phenotype or REM-OSA. Both types of OSA are also more frequent in females, although for ND-OSA our data suggests that this is possibly due to less severe OSA in this gender. Despite these common clinical features, ND-OSA is not typically a REM-OSA type. Thus, we speculate that this difference could represent a different underlying mechanism, possibly with the ND events being less reliant on upper airway collapse and hypotonia, which is more pronounced during REM sleep. This is further reinforced by the absence of independent association with BMI for ND-OSA.

Gender differences in the application of anthropometric measures for evaluation of obstructive sleep apnea

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Introduction: Obstructive sleep apnea (OSA) is globally the most commonly diagnosed sleep disorder and causes changes in respiratory patterns leading to intermittent hypoxia, hypercapnia and increased frequency of awakenings. OSA is mainly characterized by a set of symptoms resulting from apnea events, such as excessive daytime sleepiness, cardiovascular impairment, increased morbidity and mortality. Given the scale of the problem, it is important to develop simple, reliable, cost-effective methods to predict or diagnose OSA. The application of anthropometric measures is simple, cheap, accessible and with high clinical correlation. The effectiveness of these measures in general assessing health has been previously demonstrated, and they have a strong correlation with sleep apnea. **Objective:** This study proposes to establish which anthropometric variable is most accurate as a predictor of OSA in both genders. Methods: We also evaluated which measures were associated with OSA. 552 women and 450 men were submitted to polysomnography, and the anthropometric measurements as body mass index (BMI), waist-to-height ratio, neck and waist circumference were collected. The measurements were then compared with the OSA classification established by the PSG. **Results:** In women, waist circumference and waist-to-height ratio were found to be the best predictor, while in men, the factors with great potential for identification varied according to severity of the disease, highlighting waist-to-height ratio, neck circumference and BMI had strongest association. The accuracy of the classification in relation to mild-to-severe OSA based on cut-off values of 92.5cm for waist circumference was greater than 72.9% in men, and 78.9% in women based on cut off values of 95cm. Regarding severe OSA, cut-off values of 116.1cm were greater than 91.3% accurate in the male population, and 95.1% in the female population with a cut-off value of 126.5 cm. **Conclusions:** The study found waist circumference and waist-to-height ratio to be the best measure to assess sleep-disordered breathing in women. Waist-to-height ratio and neck circumferences were the best measures in men with mild OSA, but BMI was more closely associated with severe OSA. The present study identified the anthropometric variables with the highest risk for OSA and their respective cutoff value, according to gender.

Women on the stage: Will we find gender differences in Obstructive Sleep Apnea polysomnography results?

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Objectives: Historically, Obstructive Sleep Apnea (OSA) and snoring have been diagnosed primarily in men. However, increased awareness has given rise to the diagnosis of OSA in women, putting

them back on the stage. The objective of this study was to evaluate the gender differences in polysomnographic (PSG) results and relate them to clinical symptoms. **Methodology:** A retrospective study of PSG results of adult patients diagnosed with OSA obtained between 2014 and 2017 in a sleep medicine centre. Comparison of gender differences in socio-demographic, clinical and PSG data using the software, SPSS v.24, statistical difference was assumed for values < p.05. **Results:** We analyzed a sample of 258 patients, 100 (39%) female and 158 (61%) male. Regarding Apnea/Hyponea Index (AHI) and gender, the percentage of women with mild, moderate and severe OSA varied, with values of 55%, 30% and 15%, respectively. Meanwhile, the percentage of men with mild, moderate and severe OSA was more homogenous, with values of 33%, 35% and 32%. The differences in AHI distribution between genders were statistically significant ($p<.001$), as well as, Oxygen Desaturation Index (ODI) and Arousal Index (AI), with women having lower indexes. Regarding sleep stages, we found statistically significant differences between genders: sleep latency % of time spent in N1, % of time spent in N3, REM latency, and number of REMS ($p<.001$). Women had a longer sleep latency, a lower % of N1, a higher % of N3, a longer REM latency and number of REM episodes. Differences were not found for snoring, total sleep time, sleep efficiency, % of N2 and % of REM. No statistically significant differences were found between genders for mean heart rate, average or minimum SatO2. **Conclusions:** We found statistically significant differences between women and men for sleep latency, %N1, %N3, REM latency, number of REMs', AHI, ODI and AI. These results confirm published studies on sleep architecture, where women, have longer sleep latency and higher % of N3. We also confirm that men have more respiratory events, desaturations and arousals.

Different response to CPAP in man and women with chronic insomnia disorder and OSAS

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Introduction: Obstructive Sleep Apnea Syndrome (OSAS) and insomnia are two prevalent pathologies that frequently co-occur. Few studies have documented that CPAP (continuous positive airway pressure) use may improve insomnia symptoms. The majority of these studies only evaluated patients with severe OSAS and primary insomnia without co-morbid conditions. **Objective:** The objective of this study was to evaluate the response to CPAP in patients with chronic insomnia disorder (CID) with mild/moderate and severe OSAS. **Methods:** Retrospective study of all patients identified with OSAS and CID, from the outpatient sleep clinic of the *Hospital de Santa Maria* - CHLN in Lisbon. OSAS and CID were diagnosed clinically according to the ICSD 3 criteria. OSAS was considered mild/moderate if RDI was 5-30 and severe if RDI ≥ 30. Patients lost to follow up were excluded. The main outcome of the study

was clinical improvement of insomnia following CPAP therapy based on expert somnologist clinical impression. Other variables collected included gender, sex, PSG variables, CPAP compliance, insomnia subtypes, OSAS type, presence of anxiety/depressive disorder and use of sedative pharmacological treatment after CPAP use. Differences between responder and non-responders to CPAP were evaluated with T test in continuous variables and Qui2 or Fischer exact test in categorical variables, $p<0.05$. **Results:** From a database of total of 827 patient, 90 patients were identified with OSAS and CID (53.3% women). Middle/moderate OSAS was diagnosed in 68.9% and severe OSA in 31.1%. Most patients (61.1%) improved insomnia symptoms after CPAP therapy. Responders to CPAP were more frequently women (women 61.8%, men 38.2%, $p= 0.035$) and there was no other difference between responders and non-responders. On subgroup analysis, this difference was significant only in severe OSAS (women 88.9%, men 31.6%, $p =0.013$). **Discussion:** Our study reinforces that in CID patients with co-morbid OSA, CPAP therapy improves CID. This is independent of insomnia type, OSA severity categories and in patients with co-existent psychiatric symptoms. This response is more frequent in women and is dependent on the severity of OSAS in men. OSAS should be carefully evaluated in all insomnia patients. Our results suggest that in men with severe OSA, the insomnia phenotype is probably less dependent on the respiratory symptoms and further studies are needed to und erstand its physiopathology.

Effectiveness of the follow-up of patients with obstructive sleep apnea undergoing CPAP treatment in primary care units

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Introduction: Obstructive sleep apnea (OSA) is a highly prevalent disease and due to the increasing demand for hospital sleep units, there has been growing interest in ambulatory models of care for patients with OSA. Since 2015, the Portuguese model determinate the reference to primary care units of OSA patients with CPAP compliance and efficacy and with no treatment complaints. We performed a study to evaluate whether follow-up of patients undergoing treatment in the primary care units still remained stable after 18 months from discharge. The primary outcome was the comparison of CPAP compliance objectively measured using the number of hour of CPAP use per night. The secondary outcomes were the change in percentage of nights with CPAP use more than 4h, the body mass index and Epworth Sleep Scale score. **Materials and Methods:** Study participants were discharged from the hospital sleep unit from May to October 2015. We reviewed the hospital process and reassessed patients at the present time with clinical features and CPAP data. **Results:** We included 111 patients with a mean apnea-hypopnea index 38.2 ± 23.1/h, age 67.9 ± 9.8 years, 82% male, with mean CPAP use of 6.7 ± 3.3 years.

The primary care follow-up mean period was 19.1 months. The CPAP compliance was 6.9 ± 1.2 hours per night in the sleep unit vs. 6.9 ± 1.3 hours per night in the primary care follow-up, with no significant mean difference (p=0.525). There was also no significant difference in the body mass index, 32.0 ± 5.1 kg/m² in the sleep unit vs 31.7 ± 7.5 kg/m² in the primary care follow-up (p=0.119) and in Epworth sleepiness score, 4.2 ± 2.8 in the sleep unit vs. 4.3 ± 5.6 in the primary care. The percentage of nights with CPAP use more than 4h was significantly lower in the reassessment (97.7 ± 3.6 in the sleep unit vs. 89.3 ± 19.0 in the primary care follow-up; p<0.001). **Conclusions:** A 18 month follow-up of stable OSA patients disclosed similar CPAP compliance and efficacy in primary care and in sleep unit settings.

Oral Appliance Therapy - first choice in mild and moderate OSA?

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Introduction: Obstructive sleep apnea (OSA) is a disease characterized by repetitive collapse of the upper airway during sleep, resulting in desaturation and sleep fragmentation. Treatment objectives include the resolution of airway closure by applying positive airway pressure or mandibular repositioning devices (MRDs). Studies have shown that MRDs reduces snoring by more than 80% and the apnea-hypopnea index (AHI) by up to 50%. **Objectives:** To evaluate the efficacy of Silensor SL® thermoplastic adjustable MRD in the treatment of OSA. **Methods:** Retrospective study, with non - probabilistic sampling. The sample was collected using the SAM® software and treated in Excell®. Patients with a diagnosis of OSA who had a diagnostic sleep study as well as a control study, with MRD, were included. **Results:** The sample consisted of 28 patients, 75% men, with mean age of 52 years, with snoring (42.8%), nocturnal apnea (28.5%) and excessive daytime sleepiness (25%). BMI for men was 27kg/m² and for women 29kg/m². Sixteen patients performed level I polysomnography (group 1), diagnostic and control with MRD, with RDI 13/h vs. 9/h. Twelve patients underwent level III polysomnography (group 2), diagnostic and control with MRD, with AHI 12/h vs. 7/h. Regarding gender, men in group 1, were 14/h vs. 12/h and for group 2, 12/h vs. 6/h. Women in group 1, had AHI 10/h vs. 11/h and in group 2 11/h vs. 10/h. Ninety-six patients were excluded, 18 patients used MRD for snoring, and 16 patients still did not have the efficacy assessment of the therapy. **Conclusion:** MRD should be proposed to patients as it is an effective treatment for OSA. Regarding the possible gender difference found, it may only be due to the small number of the sample or the higher BMI in women.

Keywords: obstructive sleep apnea, mandibular repositioning devices.

Prevalence of sleep disordered breathing in asthmatic women

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Introduction: Asthma and obstructive sleep apnea (OSA) are common chronic respiratory disorders worldwide. It is estimated that asthma affects 1-18% of the population, especially adult women, while OSA affects around 14% of men and 5% of women. The overlap of these two diseases is also common, since asthma increases the predisposition for OSA, with common risk factors. **Objectives:** Characterize the female population with asthma and sleep disordered breathing (SDB) followed at the respiratory allergology outpatient clinic at CHUC-Hospital Geral, during 2017. **Method:** Analytical, cross-sectional, retrospective study of patients with asthma and SDB followed at this clinic. We analyzed the following variables: age, time of asthma evolution and classification, comorbidities, smoking status, pulmonary function tests (PFT), treatment and asthma control, excessive daytime sleepiness (EDS), diagnosed SDB and therapy and consequent asthma control. **Results:** We reviewed all the patients followed at this outpatient clinic and identified 58 patients with asthma and SDB, 26 (45%) of which were women. In the female population the average age was 58.5 years, 54% had nonallergic asthma and 88% adult-onset asthma. Relevant comorbidities: arterial hypertension (54%), rhinitis (50%), thyroid disease (38% - 50% with hypothyroidism) and diabetes mellitus II (19%). All of the patients had body mass index (BMI) higher than normal, 54% had obesity class I and II and 8% had morbid obesity. Only 15% had smoking habits (8% current smokers). On PFT 80% of the patients had obstrutive pattern, 8% were normal, 8% showed mixed pattern and 4% had restrition, with normal DLCO in 96% of the cases. At time of diagnosis of SDB, 8% of the patients had no asthma treatment, 4% had only anti-inflammatory therapy, 65% had association therapy (ICS+LABA; 41% with anti-leukotrienes), and 23% were on triple therapy (ICS+LABA+LAMA). One patient was corticosteroid-dependent and another one was on biological treatment. Asthma was controlled in 29% of the patients. EDS was present in 65% and justified referral to the sleep consult. All patients had a home cardiorespiratory sleep study or polysomnography. OSA was diagnosed in 88% and classified according to apnea/hypopnea index (AHI, AASM) (17% mild (AHI 5-14), 57% moderate (AHI 15-29) and 26% severe (AHI $\geq$ 30)). Positive airway pressure was initiated in 69%; 27% had indication to reduce weight, avoid supine position and control other respiratory comorbid diseases; and 4% mandibular advancement splint. After adherence to treatment measures, and at the next asthma appointment, 42% of the patients had their asthma controlled, with improvement in 23% of the cases. **Conclusions:** Severe to moderate OSA was diagnosed in 73% of the patients. Nonallergic and adult-onset asthma were more prevalent. Obesity was an important comorbidity, as were arterial hypertension and rhinitis. Obstruction on PFT was prevalent and 88% were on association therapy (GINA's step 3 to 5). Treatment of SDB contributed to better asthma control in 23% of the cases.

Obstructive sleep apnea and depression in women - a descriptive analysis

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Introduction: Obstructive Sleep Apnea (OSA) is a sleep disorder with 5% prevalence in adults, defined by collapse and obstruction of the upper airways, triggering repeated episodes of airflow reduction (hypopnea) or interruption (apnea) during sleep. These events are linked to intermittent hypoxemia and nocturnal arousals, resulting in excessive daytime sleepiness, fatigue, mood changes, organic dysfunction and poor neurocognitive performance. Depression is the most common psychiatric disorder, presenting high prevalence, especially in women. Recent studies showed a significant association between OSA and depression, poorly understood when it comes to causality, also undervalued and underdiagnosed given the overlap of symptoms common to both diseases. **Objective:** To characterize the female population from the Sleep Disorders clinic of our hospital that presents with OSA and concomitant depressive disorder. **Material and methods:** From a total sample of 291 female individuals with OSA, evaluated at the Sleep Disorders clinic of our hospital between 2011 and 2016, and based on their electronic medical record, we proceeded to select those with previous depressive disorders. As for severity, OSA was classified according to the Apnea-Hypopnea Index as mild, moderate and severe. Daytime sleepiness was assessed using Epworth Sleepiness Scale (ESS). We then collected and processed the obtained data from the first medical appointment using IBM SPSS Statistics v24®. **Results:** From the total sample, 17.5% (n=51) had previous history of depressive disorder. The mean age of the 51 involved was 58.69 years. 41% had mild, 28% moderate and 31% severe OSA. 37.2% reported excessive daytime sleepiness (ESS≥10); from these, 42% had mild, 32% moderate and 26% severe OSA. 59% of the subjects mentioned poor sleep quality, 63% reported insomnia (with predominance of early and intermediate insomnia) and 47% disturbance of daily activities. 82% took benzodiazepines, while the remainder were on therapy with other psychotropic drugs. No statistically significant correlation was found between ESS and OSA grade ($p>0.05$). 75% didn't require non-invasive ventilation, due to the use of other therapeutic approaches. **Discussion:** Several studies have shown a higher prevalence of depression in patients with OSA than the general population (17.6%), a similar value to the female population in our study. There is also evidence that OSA is more prevalent in patients with depression (18%). Although the pathophysiological relationship between these two is not well established and needs further studies, sleep fragmentation and intermittent hypoxemia are thought to trigger a cascade of events involving neurotransmission modification, leading to affective and cognitive changes which condition excessive daytime sleepiness and disturbance of daily activity. Females have a lower probability of OSA and differences in its manifestation, so the simultaneous presence of depression, as well as its therapy, may over or underestimate symptoms, adding to the complexity of the treatment and conditioning its success. We think it

makes sense to consider the possibility of OSA in patients at risk (obese, taking benzodiazepines) who present with affective and cognitive changes. Measurement of depressive symptomatology through validated scales - HAD, PHQ-9, Beck, among others - should be taken into account in the evaluation of OSA.

Fibromyalgia and OSAS: a case report

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Introduction: Fibromyalgia is a common disorder, characterized by generalized and chronic musculoskeletal pain and stiffness, associated with fatigue and non-restorative sleep sensation, which often leads to memory changes, anxiety and depression. Obstructive sleep apnea and hypopnea syndrome (OSAS) is characterized by the existence of frequent micro-arousals, secondary to the existence of pharyngeal collapse, which result in increased sympathetic activity and sleep fragmentation, leading to a clinical presentation similar to fibromyalgia. **Case Report:** A female patient, 65 years-old, without alcoholic and smoking habits, with a personal history of thyroid pathology, coronary disease, obesity, dyslipidemia and gastroesophageal reflux disease. The patient has been followed up by the rheumatologist for the period of one year due to generalized polyarthralgia, myalgia, insomnia and sensation of non-restorative sleep. She was diagnosed with fibromyalgia and medicated in this context without significant symptomatic improvement. She was referred to our sleep pathology consultation for the maintenance of these symptoms. After a careful collection of the clinical history, it was verified that the patient had other symptoms, namely snoring, witnessed apneas and frequent nocturnal awakenings. She also reported excessive daytime sleepiness, with impairment in the performance of daily activities. Evaluated Epworth scale of 14. The diagnostic hypothesis of OSAS was made and polysomnography was requested. Polysomnography: Sleep efficiency: 86.4%; Apnea Hypopnea Index (AHI): 34.5/h; AHI in supine position: 84.6/h; Oxygen Desaturation Events 28.6/h; Total Arousals Index: 21.8/h Domiciliary ventilation was initiated, with good adaptation of the patient and improvement of complaints of arthralgias and myalgias, insomnia and nonrestorative sleep. The patient abandoned follow-up at rheumatologist and stopped the medication prescribed in the context of fibromyalgia, without worsening of symptoms. **Conclusion:** Fibromyalgia and OSAS manifest themselves with similar symptoms, and numerous studies have documented sleep disorders in patients with fibromyalgia. The literature describes several cases of patients with diagnostic of fibromyalgia, whose symptoms improved after the diagnosis of OSAS and the institution of domiciliary ventilation. The authors aim to highlight the similarities in the manifestation of both syndromes, as well as the importance of investigating sleep disorders in fibromyalgia patients, especially in those who maintain symptoms after the institution of therapy for this disorder.