Conclusion: We verified that we can’t consider REM SDB as a separate entity from OSAS, presenting generally in patients with the same characteristics and the same symptomatic clinical complications that OSAS. However, it should point out to a greater prevalence of REM SDB in women when compared with the OSA, as well as the severity of the disease that is usually more severe in OSA than in REM SDB, which may indicate an initial phase of the condition, this suggestion, should be explored in further studies, including evaluating the evolution of REM SDB patients over time and evaluate the progression of the disease or not.

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Restless legs syndrome in pregnancy

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Introduction: RLS affects 5–10% of the general population, but it affects 25% of pregnant women. Sleep disorders are common in RLS. The aim of this study was to determine the frequency of RLS in pregnancy, its characteristics and associated sleep complaints.

Materials and methods: 50 pregnant women followed at the gynecology department of Vistahermosa Hospital. They completed Stop, Berlin and Pittsburgh questionnaires. The IRLSSG criteria were investigated by self-administered questionnaire and by telephone interview by a sleep specialist. Polysomnograms were obtained with a recording of the movements of both legs.

Results: 35 of 50 patients (70%) completed all questionnaires and polysomnograms was recorded in 100%. Middle age was 34 ± 4. 20% of the patients meeting IRLSSG criteria, 71% reporting the beginning of the symptoms at the end of the second trimester of pregnancy and 42% described sporadic symptoms before pregnancy (p < 0.05). 66% described a moderate-severe intensity of the symptoms, with a frequency of 4–7 nights/week (17%), 2–5 nights/week (33%) and 50% with a low frequency. One pregnant woman was evaluated in the second and the third trimester with worsening intensity and frequency of symptoms and she was completely asymptomatic the first night after delivery. Family history was present in the 45% of the cases and PLM >5 were found in 14%. Patients with RLS were younger (<35 years) (p < 0.05). No correlation was found between RLS and time of sleep onset longer than 30 min, night awakenings or total sleep time, reporting sleep quality in the last month as good. RLS pregnant were not more sleepy during the day nor did they have non-deep and fragmented sleep, such occurs in SAHOS, insomnia, and hot flushes. The proposed procedure contributes to an integrated diagnosis and treatment for sleep and circadian disorders in sleep clinics.

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Ambulatory circadian monitoring (ACM), a complementary tool in sleep medicine

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Introduction: In developed societies it is common to suffer from sleep disorders due to primary alterations in the circadian system (CS). Moreover, sleep disorders lead to CS disturbances, thus diagnosis and treatment of circadian and sleep disorders should not be addressed separately. The aim of this work is to present the ambulatory circadian monitoring (ACM) and its utility for sleep medicine. To this, wrist temperature (T), motor activity (A), body position (P), light exposure (L) and environmental temperature (ET) were monitored in subjects suffering from different sleep pathologies.

Materials and methods: Eight healthy volunteers and eight patients, attending to two sleep clinics3,4, with different pathologies (SAHOS, ASP, DSP, free-running rhythm, short sleeper, aging and menopause), participated in this study. Volunteers were subjected to ACM during a week using a multichannel device (KronoWiseTM, Chronolab, Univ. of Murcia) integrating five sensors: three built into a wristwatch (T, L, ET) and two on a bracelet (A and P). Sleep-wake states were inferred using the integrated variable TAP and Circadianware software (Chronolab, Univ. Murcia). Rhythmic and sleep analysis were performed by non- parametric, Fourier and periodogram analysis. Circadian robustness was assessed by the circadian function index (CFI) calculated from rhythm stability, fragmentation and amplitude of TAP variable.

Results: Polysomnographic representation of variables recorded by ACM allowed the differentiation of sleep pathologies. Accurate circadian phase estimation, and thus, ASP and DSP detection, was determined using the L5 timing (the five consecutive hours of minimum TAP). SHAOS was associated with impaired T rhythm, together with increased A during the five consecutive hours of minimum activity (L5). Sleep pathologies can be discriminated by biphasic representation of CFI and one index of sleep depth, (L5 for A or TAP). Patient with SHAOS, DSP and free-running sleep, suffered from chronodisruption (dissociation between T and A, P and sleep rhythms).

Conclusion: The ACM allows a reliable assessment of CS status and the detection of sleep pathologies, particularly abnormal sleep phase and non-deep and fragmented sleep, such occurs in SAHOS, insomnia, and hot flushes. The proposed procedure contributes to an integrated diagnosis and treatment for sleep and circadian disorders in sleep clinics.

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Restless legs syndrome in pregnancy

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Conclusion: RLS is frequent during pregnancy affecting 20% of pregnant woman especially in the second half and usually resolving after delivery. We want to highlight that a considerable number of patients reported RLS symptoms just before pregnancy and a family history was present. Our patients described symptoms mainly as moderate-high intensity, they didn’t complaint of sleep disturbances, perhaps because 50% of them reported a low frequency of symptoms (less than 2–5 nights/week).

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