

Comprehensive risk assessment of OSAHS in family medicine

Evaluación integral del riesgo de SAHOS en medicina familiar

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A 10% increase in body weight increases up to six times the risk of obstructive sleep apnea-hypopnea syndrome (OSAHS) and cardiometabolic complications.¹ This study aimed to carry out a comprehensive evaluation of patients at risk of OSAHS from primary care. The starting point was a population of 2419 patients 18 years of age and older, and with body mass indices (BMI) ≥ 25 , who received care in a family medicine unit ($n = 2,419$); with an estimation error of 16%, the sample size for a finite population was estimated with the formula $n = N/1 + (e)^2 (N)$.

19 women with age 43.11 ± 11.18 years and BMI 34.28 ± 5.97 participated, and 19 men with age 47.42 ± 1.60 years and BMI 33.10 ± 4.84 . Family functioning was assessed with the FF-SIL² family functioning perception test (Cronbach's $\alpha = 0.775$) and families were classified as functional with 70-57 points, moderately functional with 56-43 points, dysfunctional with 42-28 points and severely dysfunctional with 27-14 points. To assess marital satisfaction, the Pick de Weiss and Andrade Palos³ marital satisfaction scale (Cronbach's $\alpha = 0.884$) was used, and it was classified as good with 24-39 points, bad with 40-56 points and very bad with 57-72 points. The OSAHS risk level was estimated using the STOP-Bang scale (Cronbach's $\alpha = 0.608$) and was classified as low risk with ≤ 2 points, high risk with 3-5 points, and very high risk with 6-8 points. The three OSAHS

risk groups classified with the STOP-Bang scale⁴ were compared with each other using ANOVA, based on biochemical, clinical, and somatometric parameters, and the patient's perception of family functioning and spouse's marital satisfaction were also evaluated. Table 1 shows the comparison between OSAHS risk groups. Increases in systolic and diastolic blood pressure levels, neck circumference, hemoglobin, and hematocrit were the indicators best associated with increased risk of OSAHS, and could be used to assess the need for interconsultation with services specialized in sleep disorders and nutrition.

When evaluating the perception of family functioning by the patient and marital satisfaction by their partner, it was found that, in the group of obese patients at high risk of OSAHS, but not in those who were overweight, it was common to find that they perceived living in families functional or moderately functional and that, however, their partners had poor or very poor marital satisfaction ($\chi^2 = 10.179$; $p = 0.038$). There may be a distorted perception of family functioning in patients with obesity and high risk of OSAHS. The exploration of family dynamics and conjugal relationships can help to unravel the psychosomatic environment that feeds the disease in the most important support network, the family⁵, and to guide psychoeducation and psychotherapy activities.

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Table 1. OSAHS risk levels with respect to biochemical, clinical and somatometric variables

Variables	Low risk of OSAHS (n = 4)	High risk of OSAHS (n = 19)	Very high risk of OSAHS (n = 15)	F	p
Hemoglobin (g/dl)	14.45 ± 0.29	14.61 ± 0.39	16.39 ± 0.48	4.975	0.013*
Hematocrit (%)	41.82 ± 0.79	43.35 ± 1.17	47.89 ± 1.34	4.423	0.019*
Glucose (mg/dl)	95.25 ± 1.10	103.73 ± 3.23	104.80 ± 4.99	0.587	0.561
Creatinine (mg/dl)	0.70 ± 0.40	0.78 ± 0.16	0.86 ± 0.12	2.121	0.135
Triglycerides (mg/dl)	318.25 ± 121.15	240.94 ± 26.92	258.36 ± 142.93	0.492	0.616
Systolic blood pressure (mmHg)	132.50 ± 12.58	123.42 ± 15.63	139.33 ± 12.79	5.217	0.011*
Diastolic blood pressure (mmHg)	88.75 ± 1.25	81.31 ± 2.53	91.66 ± 2.47	4.645	0.016*
Cardiothoracic index	0.40 ± 0.03	0.42 ± 0.05	0.44 ± 0.04	1.603	0.213
Neck circumference (cm)	36.25 ± 1.25	39.26 ± 3.70	44.20 ± 3.36	12.38	0.001*
Body mass index	29.88 ± 4.68	32.95 ± 3.52	33.69 ± 5.40	2.326	0.113

*Statistically significant differences when comparing the groups with each other.

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Conflicts of interest

The authors declare no conflicts of interest. Approved by the Local Health Research Committee R-2011-1602-18.

Ethical disclosures

Protection of people and animals. The interests of participating persons were protected in accordance with institutional norms and the General Health Law regarding research.

Data confidentiality. Confidentiality was maintained in accordance with institutional regulations and the General Health Law regarding research.

Right to privacy and informed consent. Informed consent was taken and the project was approved by the local ethics and research committee.

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