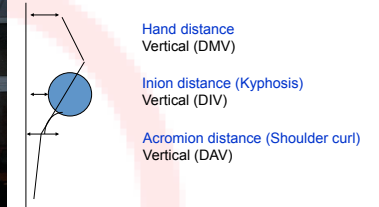


Postural aspects and polysomnography

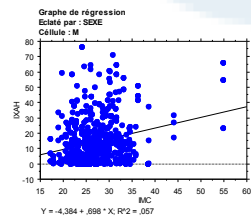
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Objectives / Introduction: The clinical observation of patients referred for suspected sleep apnea shows similarities in different parameters. A neck circumference greater than 42cm is clearly identified. Cervical kyphosis, curling, antepulsion of the shoulder are easily assessable parameters in current clinical practice.

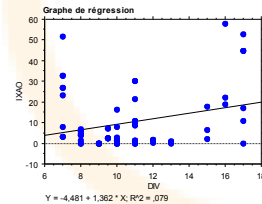
Methods: The postural parameters are obtained, the subject in a standing position at rest, the back aligned to a vertical plane, from the measurement of the distances inion vertical, acromion vertical and hands wall in maximum antepulsion. These parameters as well as those already known (neck circumference) are correlated with polysomnography parameters (apneas, desaturations, etc.) and autonomic parameters (RR variability, sympathovagal balance). This analysis is carried out from a database of 523 patients combining polysomnographic recordings and clinical examination. The different parameters are compared by regression calculation and analysis of variance.



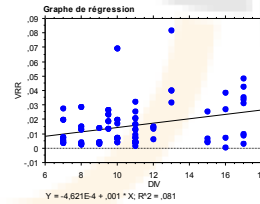
Results: It is found significant correlations ($p < 0.01$) with the indexes of apnea, desaturation for known parameters such as neck circumference and waist circumference, BMI. Kyphosis and shoulder curl are also correlated with the apnea index ($p < 0.01$) as well as with RR variability. Shoulder curl correlates specifically with desaturation index ($p < 0.05$), systolic blood pressure at rest ($p < 0.02$) and, very surprisingly, with periodic sleep movements ($p < 0.01$) as well as the RR variability ($p < 0.01$). No significant relationship has been identified between the antepulsion and the various parameters.



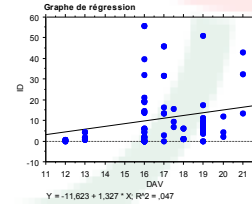
BMI/IAH CORRELATION



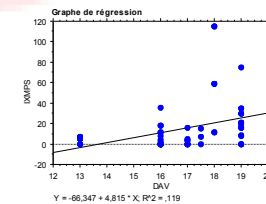
INION-VERTICAL/IAH CORRELATION



INION-VERTICAL/RR-VAR CORRELATION



ACROMION-VERTICAL/ID CORRELATION



ACROMION-VERTICAL/PLMS CORRELATION

Conclusions: The postural aspects of patients referred for suspected sleep pathology should be part of the clinical examination. Like **neck measurement, cervical kyphosis and shoulder curl measurement should be part of the clinical observation**. Taking into account postural aspects makes it possible to legitimize a type of rehabilitation approach for patients who do not justify the use of treatment with CPAP or OAM.

Disclosure: Nothing to disclose