European Respiratory Society Annual Congress 2013

Abstract Number: 7027

Publication Number: 3045

Abstract Group: 4.2. Sleep and Control of Breathing

Keyword 1: Apnoea / Hypopnea Keyword 2: Neoplastic diseases Keyword 3: No keyword

Title: Association between markers of aggressiveness of malignant cutaneous melanoma and sleep disordered-breathing

Dr. Francisco 196 Campos-Rodriguez fracamrod@gmail.com MD ¹, Dr. Miguel A. 197 Martinez-Garcia mianmartinezgarcia@gmail.com MD ², Dr. Antonio 198 Martorell-Calatayud antmarto@hotmail.com MD ³, Dr. Amalia 199 Perez-Gil amalia.perezgil@gmail.com MD ⁴, Dr. Eduardo 200 Nagore eduyame@meditex.es MD ⁵, Dr. Irene 201 Valero-Sanchez Ire.valero@gmail.com MD ², Dr. Maria J. 202 Selma-Ferrer maselfe@gmail.com MD ², Dr. Eusebi 203 Chiner-Vives echinervives@gmail.com MD ⁶, Dr. Pedro 204 Landete landete.pedro@gmail.com MD ⁶, Dr. Josep M. 205 Montserrat JCANAL@clinic.ub.es MD ⁷, Dr. Cristina 206 Carreras ccarrera@clinic.ub.es MD ³ and Dr. Ramon 207 Farre rfarre@ub.edu MD ⁶. ¹ Pneumology, Hospital Universitario de Valme, Sevilla, Spain ; ² Pneumology, Hospital Universitario y Politecnico La Fe, Valencia, Spain ; ³ Dermatology, Hospital de Manises, Valencia, Spain ; ⁴ Dermatology, Hospital Universitario de Valme, Sevilla, Spain ; ⁵ Dermatology, Instituto Valenciano de Oncológia, Valencia, Spain ; ⁶ Pneumology, Hospital San Juan de Alicante, Alicante, Spain ; ⁶ Pneumology, Hospital Clinic - IDIBAPS, Barcelona, Spain and ⁶ Facultat de Medicina, Universidad de Barcelona, Barcelona, Spain .

Body: Background. Recent studies in humans have shown an association between sleep-disordered breathing (SDB), including overnight hypoxia, and the incidence and mortality of cancer, but no study has focused on a specific type of cancer. The objective of this study was to analyze the relationship between some markers of cutaneous malignant melanoma (CMM) aggressiveness and the severity of SDB. Methods. We performed a prospective, multicenter observational study in 56 consecutive patients diagnosed with CMM. Measurements of CMM aggressiveness included: number of mitosis/mm², Breslow Index, presence of ulceration and growth rate of melanoma (GRM). Every participant underwent a diagnostic respiratory polygraphy. Multivariate analyses were used to investigate the independent relationship between SDB severity measured by the apnoea-hypopnoea index (AHI) and oxygen desaturation indexes (ODI3% and ODI4%) and markers of CMM aggressiveness. Results. The prevalence of SDB (AHI≥5) in the cohort was 60.7% and severe SDB (AHI≥30) was present in 14.3% of the patients. In fully adjusted multivariate analyses, AHI (OR 1.17; 95%CI 1.03-1.34), ODI3% (OR 1.14; 95%CI 1.03-1.26) and ODI4% (OR 1.3; 95%CI 1.04-1.45) were independently associated with an increased GRM. Furthermore, AHI, ODI4% and ODI3% correlated with other aggressiveness factors of CMM, such as the Breslow Index, presence of ulceration and mitotic index. Conclusion. SDB severity independently predicts aggressiveness of cutaneous malignant melanoma.