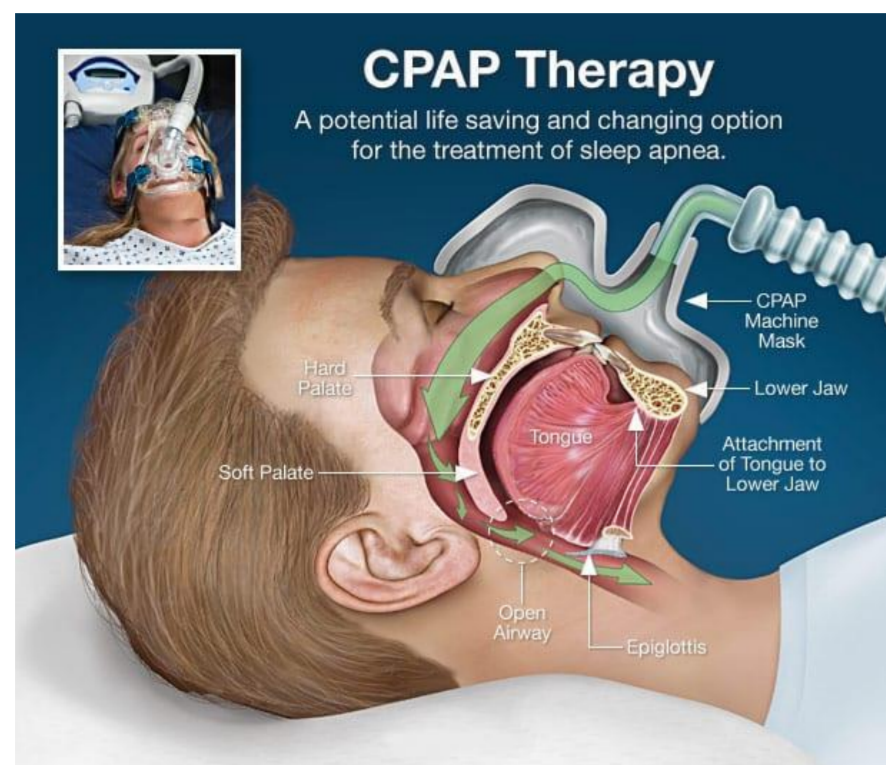


CAM Lo Iacono



	CPAP N=64	NO CPAP N=85
Età	62,9 ± 12,4	60,9 ± 11,8
BMI	32,1 ± 7,8	32,2 ± 8,2
Qualità del sonno molto buona	3,12 %	2,53 %
Qualità del sonno abbastanza buona	50 %	55,3 %
Qualità del sonno abbastanza cattiva	42,2 %	37,6 %
Sesso Maschile	62,5 %	68,2 %
Fumo	12,5 %	18,8 %
Iperensione arteriosa	57,8 %	70,5 %
Alcol	81,2 %	72,94 %
Dislipidemia	63,6 %	50,0 %
Pittsburg	56,2 %	56,4 %
Berlino	57,8 %	65,8 %
Athens	45,3 %	40 %
AMI	36,8 ± 19,9	37,8 ± 23,1
Epworth	25,5 %	23,2 %

Tab.1

Introduction

Therapy with nocturnal continuous positive airway pressure (CPAP) is the " Gold Standard " treatment for Obstructive Sleep Apnea Syndrome (OSAS), a breathing disorder during sleep. OSAS has serious adverse health effects, resulting from impaired breathing, snoring, poor quality of sleep, and cardio-cerebrovascular sequelae. When used appropriately, CPAP treatment is highly effective in normalizing breathing and sleep, improving symptoms and reducing the risk of adverse events. However, patients do not necessarily accept, tolerate or comply with the treatment.

Aim of the study:

To evaluate the adherence of patients with moderate-severe OSAS to CPAP therapy, and highlight the predictive factors of adherence to therapy.

To evaluate which anthropometric parameter, anamnestic data and tests, which investigate sleep disorders, could be predictive of adherence to therapy.(fig.1)

Materials and methods:

Enrolled from 2017 to 2021, 200 patients with moderate-severe OSAS eligible for CPAP therapy. Of the 51 excluded from the study due to lack of data, 64 accepted CPAP therapy and 85 did not adhere. Patients were divided according to gender and age into three classes: under 65 years, 65-75 years and over 75 years. For all patients, a complete anamnesis was collected and questionnaires were administered to investigate daytime sleepiness, snoring and sleep quality (Epworth Sleepiness Scale, Athens Insomnia Scale, Berlin Test, Pittsburgh Sleep Quality Index) and the parameters measured anthropometrics (weight, height, BMI).(tab.1) Statistical analysis was conducted using IBM SPSS Statistics 25.0 software

Results:

Observed 2 groups: adhering group (CPAP) and not adhering group (no CPAP) to CPAP therapy. Sporadic alcohol consumption is well represented in both groups (fig.1). Average BMI around 32 in both groups. Arterial hypertension was present in 70.5% in the non-adherent group (fig.2). The Berlin test showed that high-risk patients in the no-CPAP group were 65.8% versus 57.8% of CPAP patients. The severity of OSAS in the two groups was homogeneous. The no CPAP group appears to have a overall better sleep quality (58.8%), albeit slightly, compared to the CPAP group (53.1%) (fig.3). The PSQI record an almost identical result, with 56% of patients in both groups declaring that they have poor quality sleep. Among the variables evaluated, the only ones able to approach statistical significance were the age group over 75 with p = 0.05 (fig.4) and the smoking habit with p = 0.078 (fig.5).

Our study shows that the only characteristics capable of approaching the appropriate statistical weight in predicting CPAP compliance were age and smoking habit (tab.2), while other parameters, such as the patient's subjective symptoms than in other studies they proved valid, they did not lead to the same result in our work.

Discussion and Conclusions:

The results of our study show how screening tests, medical history and anthropometric parameters are not sufficient to predict adherence to therapy, despite having observed greater compliance in the geriatric population than in the adult population.

The need to increase adherence to treatment and the results of this study suggest focusing interventions on psychological and behavioral factors.

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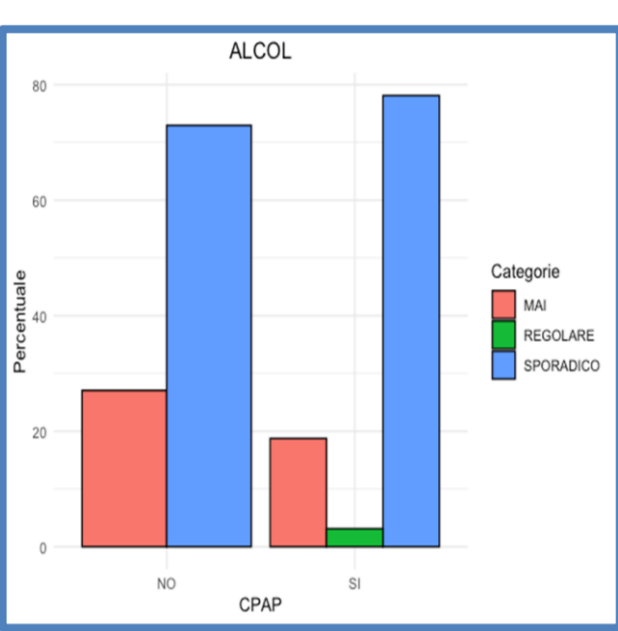


fig.1

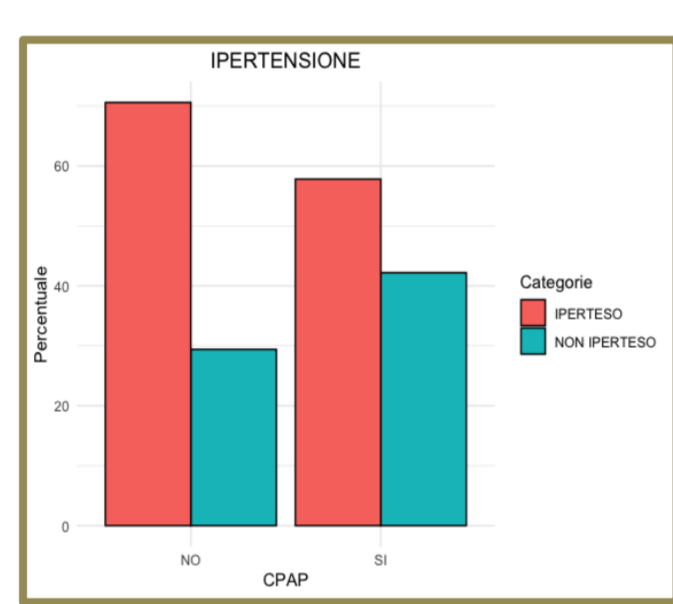


fig.2

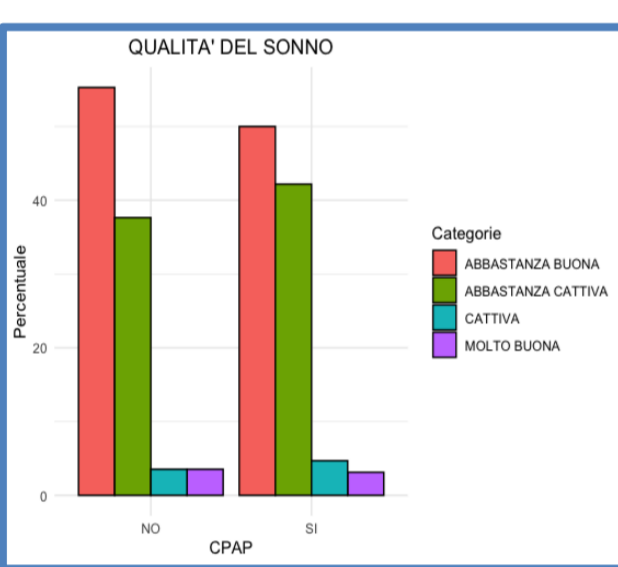


fig.3

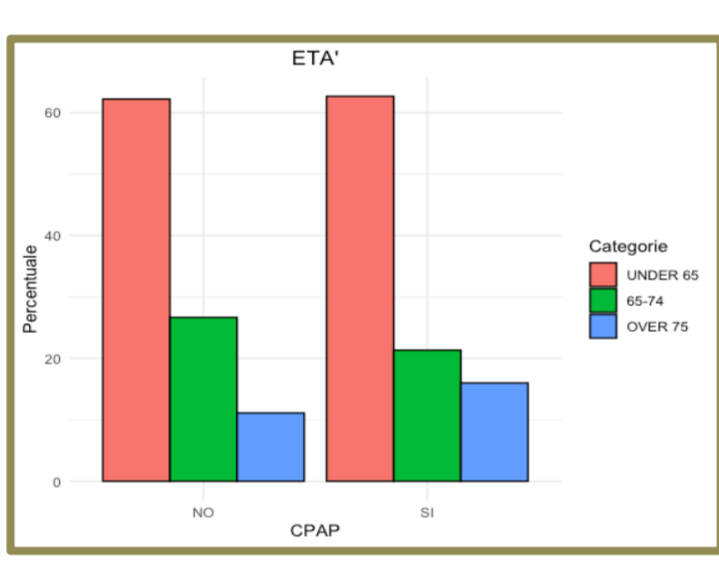


fig.4

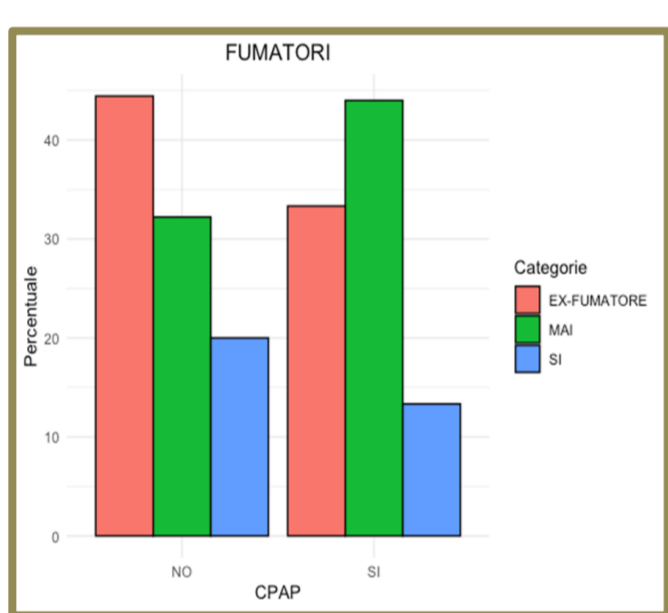


fig.5

	Estimate	Std. Error	z value	Pr(> z)
Sesso	-0,076	0,436	-0,175	0,860
Età under 65	0,479	0,467	1,025	0,305
Età over 75	1,239	0,632	1,958	0,050
BMI	0,007	0,023	0,328	0,742
Iperensione arteriosa	-0,528	0,427	-1,235	0,218
Fumo	-1,039	0,589	-1,761	0,078
Alcol	0,720	0,482	1,495	0,135
Qualità sonno abbastanza buona	0,209	1,023	0,205	0,837
Qualità sonno abbastanza cattiva	0,688	1,066	0,645	0,518
Qualità sonno cattiva	1,363	1,431	0,953	0,340
AMI	-0,207	0,388	-0,539	0,590
Pittsburgh Sleep Quality Index	-0,304	0,453	-0,671	0,502
Epworth Sleepiness Scale	0,428	0,462	0,927	0,354
Athens Insomnia Scale	0,171	0,510	0,337	0,736
Test di Berlino	-0,448	0,432	-1,038	0,299
Costante	-0,759	1,446	-0,525	0,599

Tab.2