

코골이 및 수면 무호흡증 환자에서 동반 질환의 유병률 분석

정유삼 · 김재호 · 박형욱 · 김준모 · 박윤근 · 김용재 · 이봉재

Prevalences of the Associated Diseases in Patients with Snoring and Sleep Apnea

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ABSTRACT

Background and Objectives : Many reports have been made regarding the association between snoring and sleep apnea with systemic diseases such as hypertension, ischemic heart disease, and cerebrovascular disease. The aim of this study is to evaluate and analyze the prevalence of such associated diseases in Korean patients with snoring and sleep apnea diagnosed by polysomnography. **Materials and Methods** : 462 Korean patients (395 males and 67 female, aged 6 to 75) on whom polysomnography were performed were included in this study. Retrospective review of the medical records of these patients was done and the prevalence of the associated diseases were surveyed according to severity of respiratory disturbance index (RDI) and minimal O₂ saturation (Min. SaO₂). **Results** : The prevalence of hypertension was 31.2% and it was correlated with severity of RDI. The prevalence of ischemic heart disease was 9.3% and it was associated with the severity of RDI and Min. SaO₂. Endocrine diseases with the exception of DM was significantly correlated with the severity of Min. SaO₂. The prevalence of chronic pulmonary disease was highly associated in patients with Min. SaO₂ <65. **Conclusion** : Snoring and sleep apnea are not simple problems of localized obstruction of an airway but should be considered and managed as generalized diseases involving an array of organs. (Korean J Otolaryngol 2001;44:283-7)

KEY WORDS : Prevalence of associated disease · Snoring · Sleep apnea.

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moderate, 65% severe . , chi-square test Cochran - Armitage trend test RDI 가 .

1995 1 1998 1

가 395 , 가 67 462
6 75 46.2 .

(289 , 62.4%) (103 , 11.7%, 187 40.5%, 54
22.3%), (55 , 11.9%) 28 6.1%,
가 61.5%, 31.8%, 24 5.2% (Fig. 1).
1.7%, 가 5.0% .

RDI 114 11
9.6%, 141 38 27.0%,
114 45 39.5%, 93 50
53.8%, 462 144 31.2%
RDI 가 가 가
(p<0.05)(Table 2).
(Minimal O₂ Saturation, Min. SaO₂)
240 55 22.9%,
185 81 44.8%, 37 8

RDI(Respiratory Disturbance Index)
RDI(Respiratory Disturbance Index)
4 5
normal, 5 20 mild, 20 40 mo-
derate, 40 severe (Table 1).
(Minimal O₂ Saturation, Min. SaO₂)
85% mild, 65% 85%

Table 1. BMI associating with the severity of RDI significantly (p<0.05)

	RDI	Patient number	BMI(mean)
Normal	<5	114	24.9
Mild	5 - 20	141	25.3
Moderate	20 - 40	114	25.6
Severe	>40	93	28.3

RDI ; Respiratory disturbance index, BMI ; Body mass index

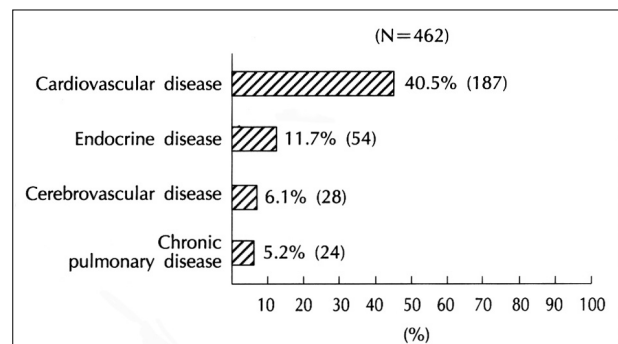


Fig. 1. The prevalences of associated diseases (Number of total patients = 462).

Table 2. The prevalences of cardiovascular diseases according to severity of RDI (Total 462 patients)

RDI	Hypertension	IHD	Arrhythmia
<5	11 (9.6%)	6 (5.3%)	6 (5.3%)
5 - 20	38 (27.0%)	9 (6.4%)	2 (1.4%)
20 - 40	45 (39.5%)	10 (8.8%)	3 (2.6%)
>40	50 (53.8%)	19 (20.4%)	6 (6.5%)
Total	144 (31.2%)	44 (9.3%)	17 (3.7%)

IHD ; Ischemic heart disease

Table 3. The prevalences of cardiovascular diseases according to severity of Min. SaO₂ (Total 462 patients)

Min. SaO ₂	Hypertension	IHD	Arrhythmia
≥ 85	55 (22.9%)	14 (5.8%)	8 (3.3%)
65 - 85	81 (43.8%)	18 (9.7%)	7 (3.8%)
<65	8 (21.6%)	12 (32.4%)	2 (5.4%)
Total	144 (31.2%)	44 (9.5%)	17 (3.7%)

IHD ; Ischemic heart disease

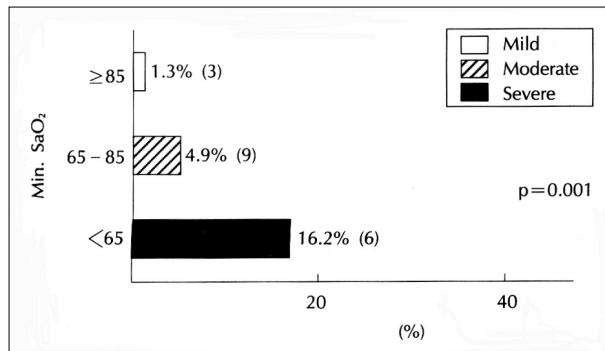


Fig. 2. The prevalences of endocrine disease except DM according to severity of Min. SaO₂.

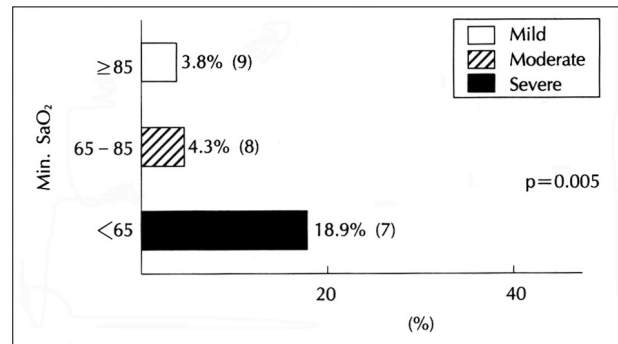


Fig. 3. The prevalence of chronic pulmonary disease according to severity of Min. SaO₂.

Fig. 2. The prevalences of endocrine disease except DM according to severity of Min. SaO₂.

9) 9.5% RDI 가 1%

8) 10 - 12) 17 10 PVC(premature ventricular contraction) sinus arrhythmia , 7 4 (A - V block), 2 S - T prolongation, 1 sinus tachycardia 8.2% 13)

가 (ac - rome-galy) 18 6 , 5 , 가 2 14)15) 16) 6.1% RDI , 12 (42.8%) , 16 (57.2%) 16 가 가 12 (75%) 17 - 19) 65 18.9% 가 , 20) (overlap syndrome)

가 .

가 31% RDI 가 가 65%

가 ,

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