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Clinical assessment and polysomnographic study of sleep apnea in a Chinese population of snorers

Key words:
Obstructive sleep apnea, Gender, Elderly,
Hypoxia, Snoring

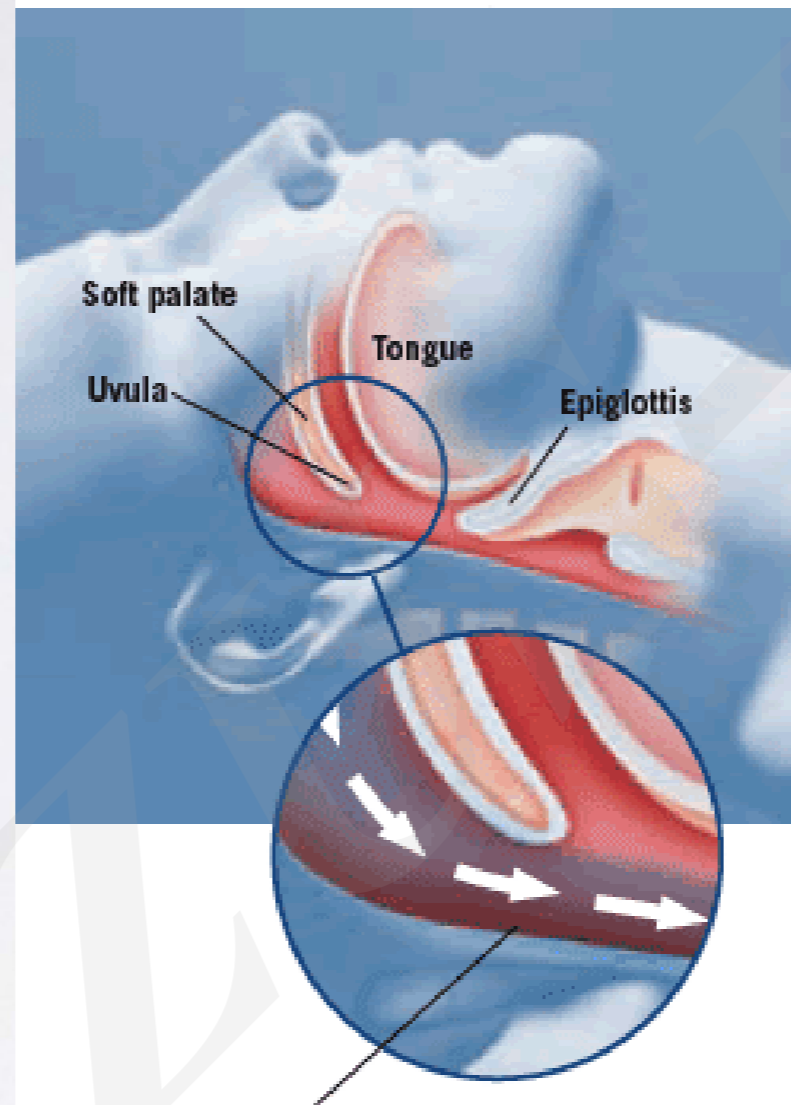


Epidemiology of snoring and obstructive sleep apnea

The reasons for snoring

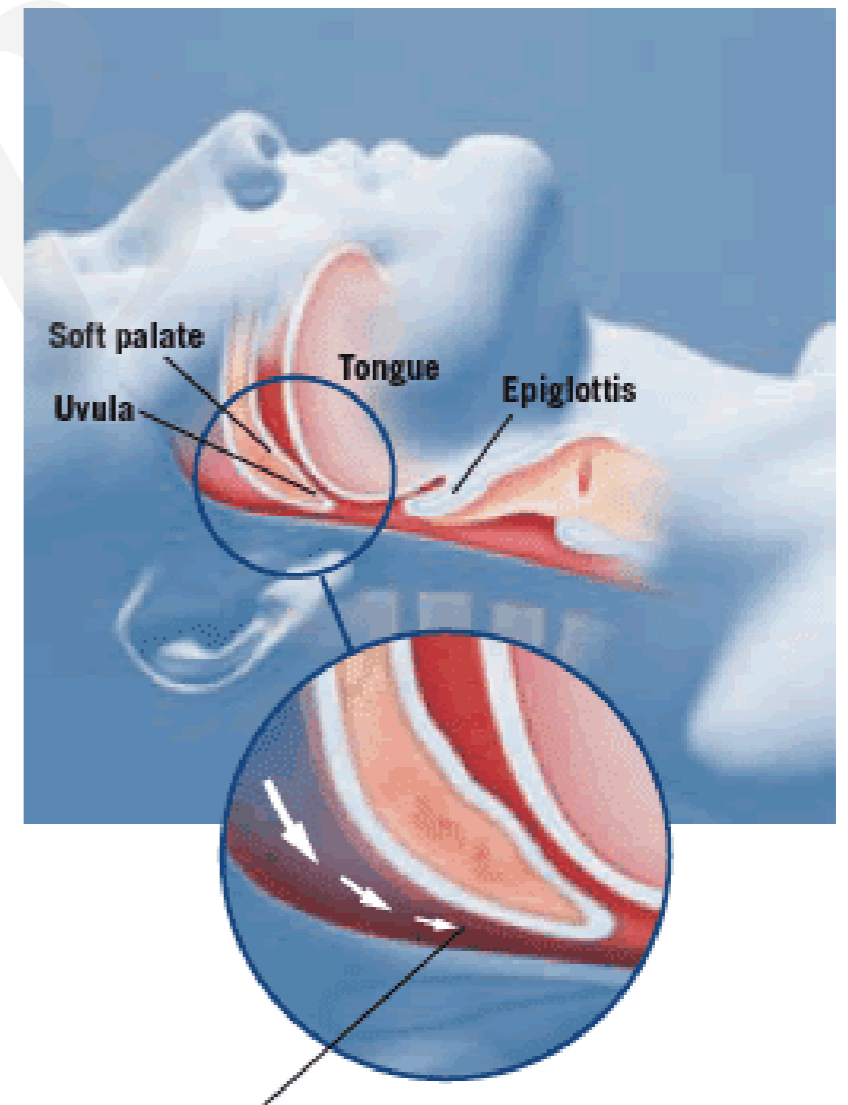
The number of people who snore is increasing. The prevalence of OSA in the general population is 2-4%, and the incidence of OSA is likely to rise (Amy et al., 2014; De Backer, 2013)

Opened Upper Airway



Clear and open upper airway allows air to flow freely to and from the lungs.

Closed Upper Airway



Snoring and apnoeas (breathing pauses) are observed when the upper airway collapses.

Study methods

Clinical assessment

- Anthropometric data
- Symptom
- ESS scores
- Comorbidities
- Physical examination

Sleep study

- AHI/RDI
- Nadir SaO₂
- Average SaO₂
- ODI
- T90

Inspection item of PSG

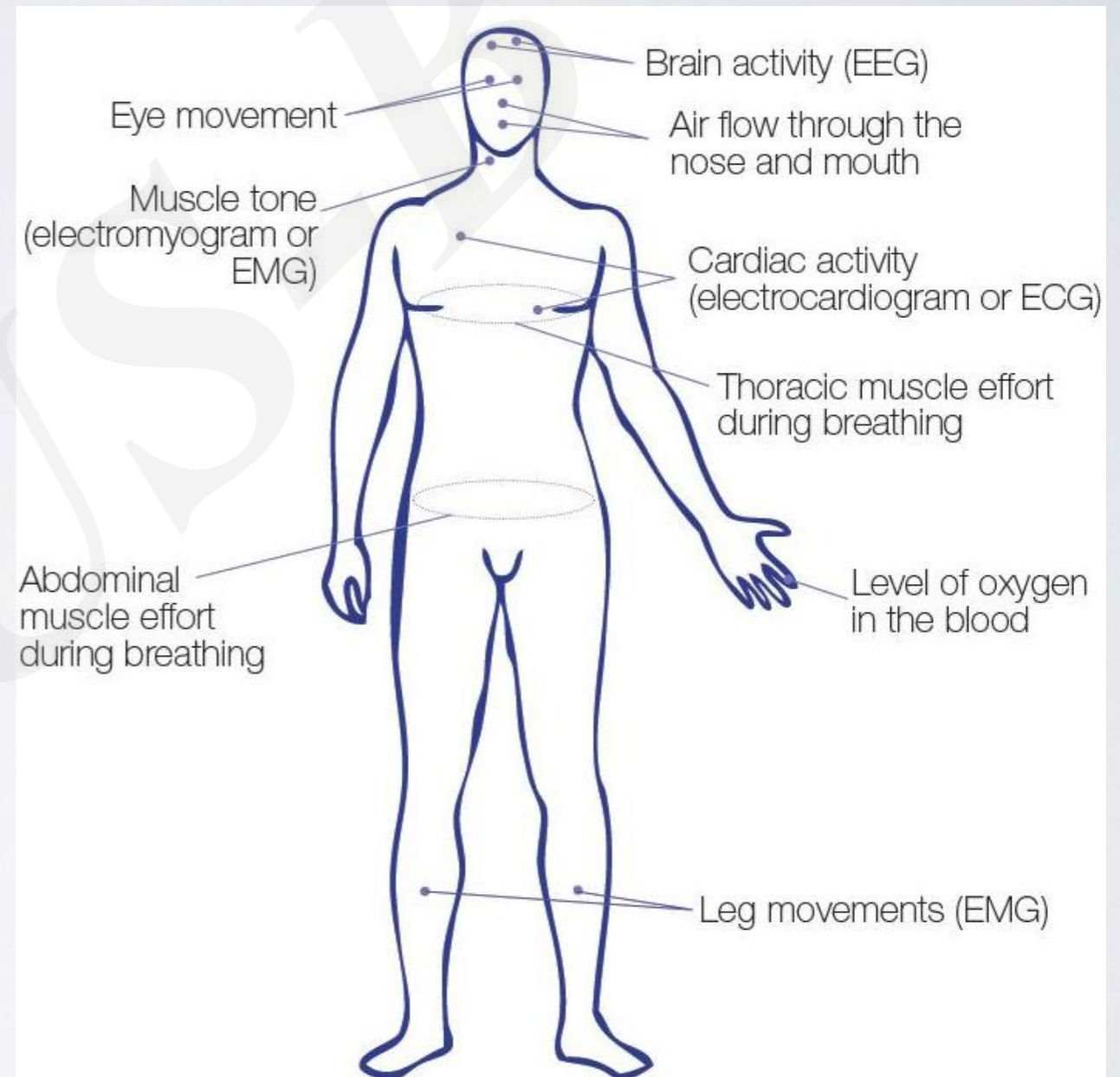
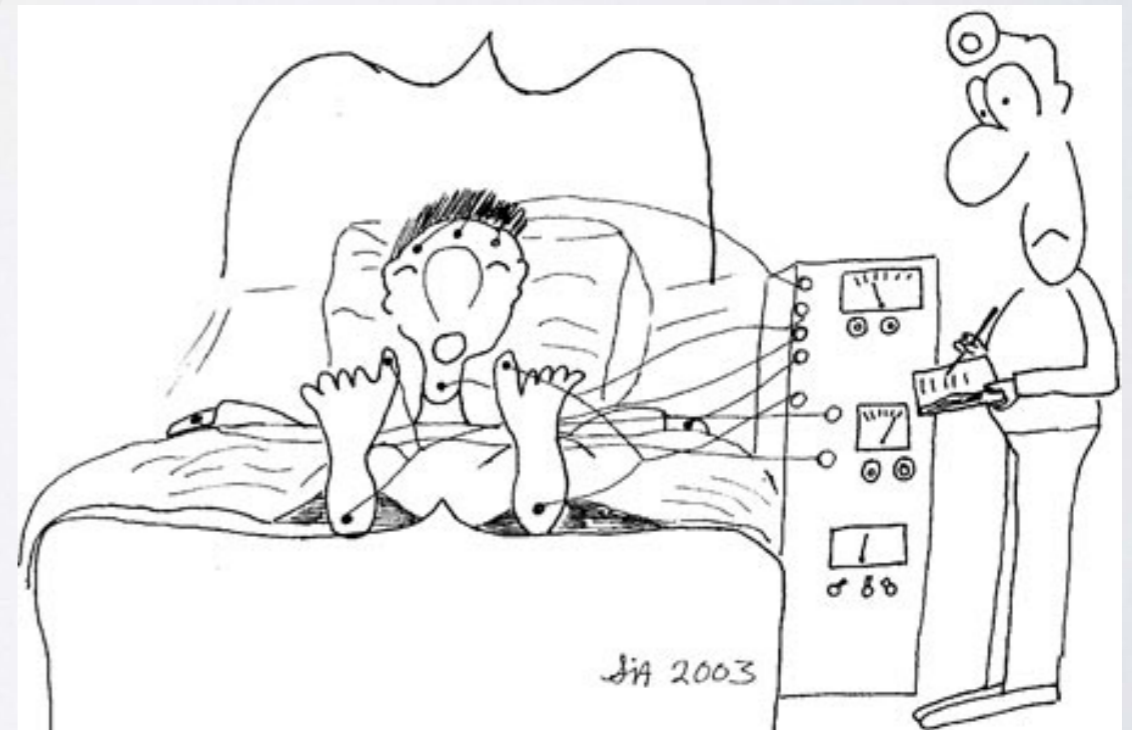


DIAGRAM - POLYSOMNOGRAPHY

Characteristics of obstructive sleep apnea

Features of OSA are discussed under following sections:

- Correlation between clinical data and PSG results
- Phenotypes of different severity
- Gender differences in OSA
- Age differences in OSA



Findings and Research Priorities

In this study, we find:

- Neck circumference, waist circumference and BMI are good indicators to assess the severity of disease
- Male OSA patients had more severe conditions, and their work was influenced more frequently
- The incidence of nocturia and heart disease were higher in elderly OSA patients

Research Priorities:

- This study is a comprehensive work, with a large sample to establish some important results including detailed anthropometric measurements and comorbidities on the epidemiology of OSA
- To our knowledge, this is the first study examining a population of snorers and investigating the gender and age differences in clinical, anthropometric and PSG results in OSA patients