

1.)가 5
9%, 24% , RDI가 5
(daytime somnolence)
2% 4%
RDI 5
78%, 57%
(Fig. 1). , RDI가 15
26%, 8% .²
가
가
가
10%
15
system Home monitoring
RDI 5
81% , 20 44% .³
2 ~ 4%

2. .⁴

. Young ¹ 65
RDI(respiratory disturbance index;

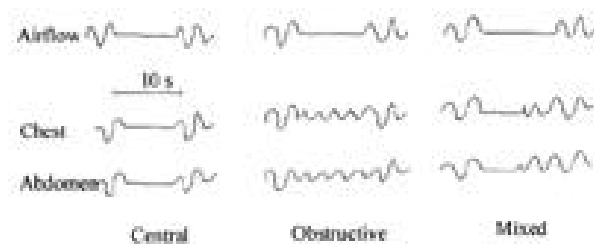


Figure 1. Types of sleep apnea. As compared to obstructive sleep apnea, no respiratory effort (chest and abdominal wall motion) is observed during apneic period of central sleep apnea.

3.
(1)
가
60 ~ 90%
(BMI; body mass index)가 28 kg/m² ,⁵
가 29 kg/m²
10 ~ 14 ,⁶⁻⁸
Winsconsin Sleep Study 가 1
kg/m² 가 4.5 가

(2)
가
10 .⁹
3 .¹⁰
25 ~ 55

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(geniohyoid, sternohyoid), 2)
(genioglossus), 3) (tensor palatini,
levator palatini)

inspiratory phasic muscle(, genioglossus
m.)
tonic muscle(, tensor palatini m.)

21

22

(negative pressure reflex)

가

23

phasic muscle

tonic muscle

가

24

phasic muscle

가

25-27

(pharyngeal collapse)

REM

28

(Fig. 2).

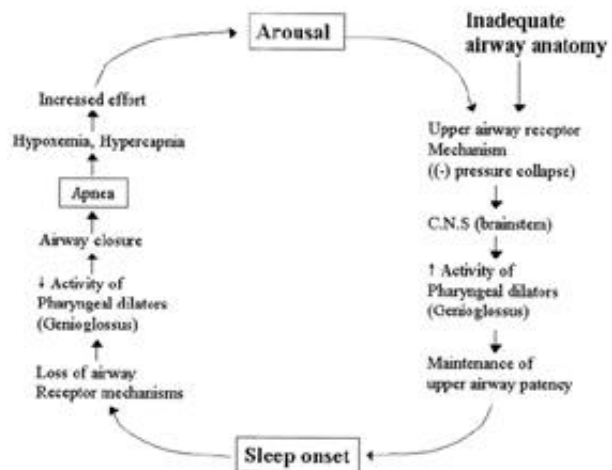


Figure 2. The pathophysiology of obstructive sleep apnea.

4.

1)

(hyoid bone) (styoid process)
가

가

(collapsibility) . Acoustic
reflection, cephalometric radiographs,
bronchoscopic technique, CT, MRI

16-19

가

가

20

2)

1)

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(2)

2) CPAP (Continuous Positive Airway Pressure)

1981 nasal CPAP
가 CPAP
(Fig. 3).

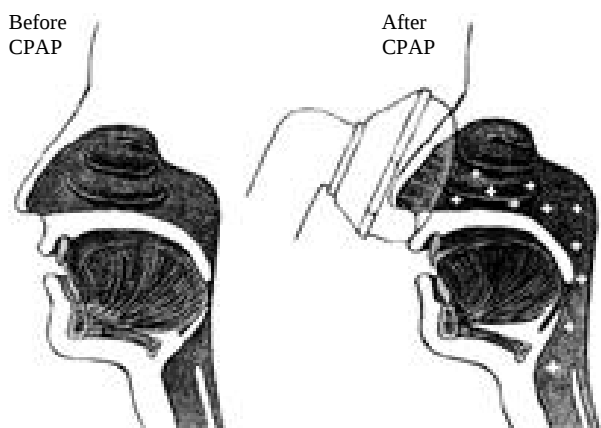


Figure 3. The effect of nasal CPAP (continuous positive airway pressure). Before CPAP, upper airway obstruction occurs at palate and base of tongue. After nasal CPAP airway obstruction is relieved by positive pressure.



Figure 4. A Oral appliance device.

nasal CPAP
68-70 placebo-controlled randomized
crossover study 71-72 CPAP

53 CPAP
CPAP
()
CPAP
65~90% 73-75 가 CPAP
가 가
76-77 CPAP
78-79

BIPAP(Bilevel positive airway pressure)

BIPAP CPAP
가 BIPAP CPAP randomized
study 가가 80
BIPAP CPAP 81
BIPAP

3) Oral Appliances

가
(Fig. 4). ASDA(American Sleep Disorders
Association) oral appliance
73~100%
51% 82 oral
appliance
가 83-84
ASDA oral appliance 85

4)

(1)

가

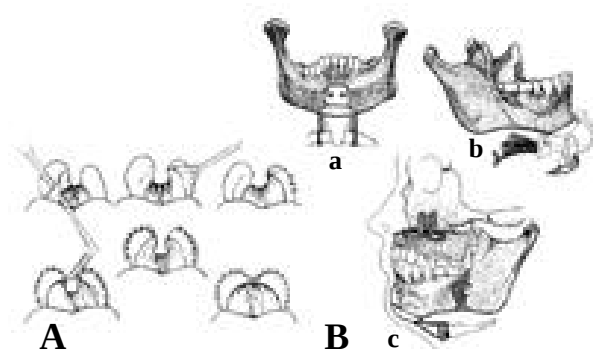


Figure 5. Surgical treatments of obstructive sleep apnea. **A.** Uvulopalatopharyngoplasty, **B.** a,b Mandibular osteotomy with genioglossal advancement and hyoid suspension, **B.** c. Bimaxillary advancement.

(2) Uvulopalatopharyngoplasty(UPPP)

UPPP

가

(Fig. 5-A). UPPP

가

meta-analysis UPPP 500
RDI 38% , RDI가 50%

53%, RDI가 50% RDI가 20
44% .⁸⁶ LAUP (Laser-
assisted uvuloplasty) CO₂
UPPP

(3) Mandibular osteotomy with genioglossal
advancement and hyoid myotomy
UPPP

genioglossus m. 1cm가 ,
RDI

가 50% 20
60% (Fig. 5-B.a,b).⁸⁶ Stanford
group cephalometry,

UPPP UPPP with
genioglossal advancement 78%
⁸⁸

bimaxillary
advancement (Fig. 5-B.c),

90% .⁸⁹

(4) Radiofrequency(RF) Ablation

가 RF

RF

가

가

⁹⁰

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