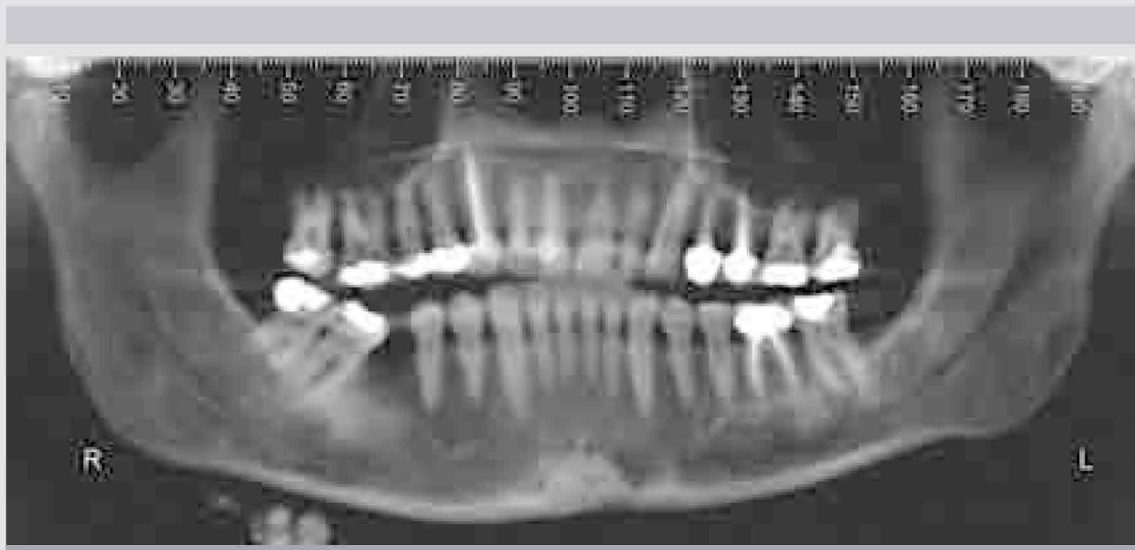


## CLINIC CASE 5

Male patient, 49 years, with severe snoring, daytime sleepiness (Epworth scale of 12) refers constant tiredness. We commenced treatment with CPAP at a pressure of 6 cm of water, after forty-eight months the patient does not tolerated by the marks on the face and dry mucous membranes.

*Biometrics:* Height 1.71 cm, weight 98 kg, BMI: 30, neckline 44.

PSG conventional diagnostic procedure. Apnea-hypopnea index IHA = 36 (normal up to 5 / h). Oxygen desaturation index ODI= 34. No comorbid factors (hypertension, cardiovascular disease, etc.) (Figs. 1, 2, 3 and 4).



**Figure 1.** Orthopanthogram.



**Figure 2.** Intraoral front.

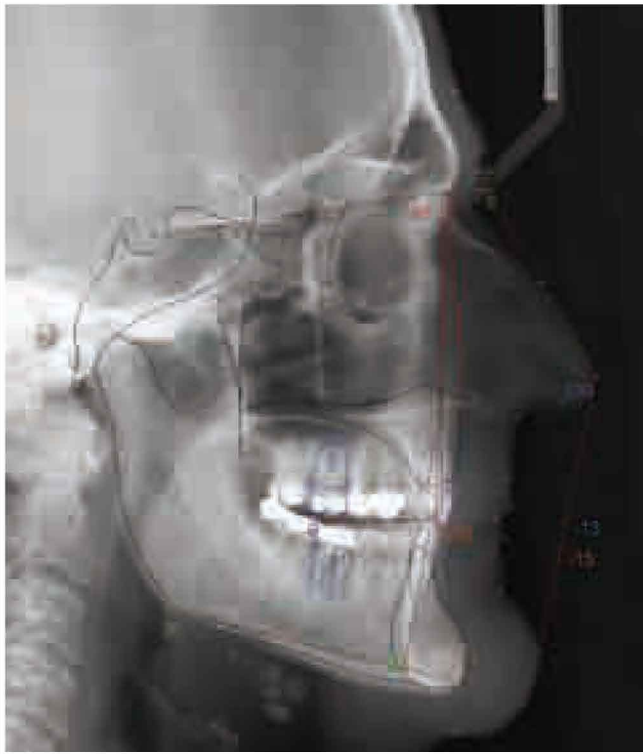


**Figure 3.** Intraoral occlusal superior.

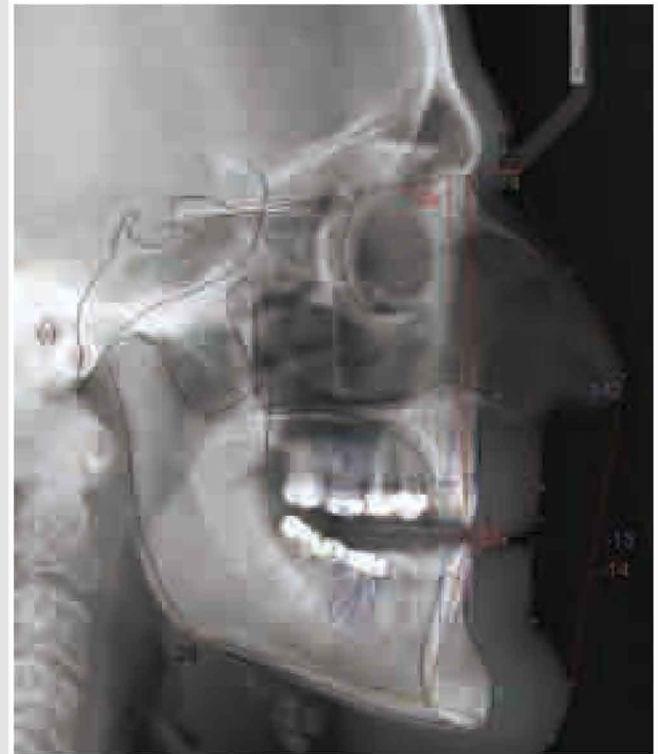


**Figure 4.** Intraoral occlusal lower.

The cephalometric analysis revealed that this was a class I bone brachycephalic trend pattern (Fig. 5), overtaking the space does not substantially change the anteroposterior UA (Fig. 6).

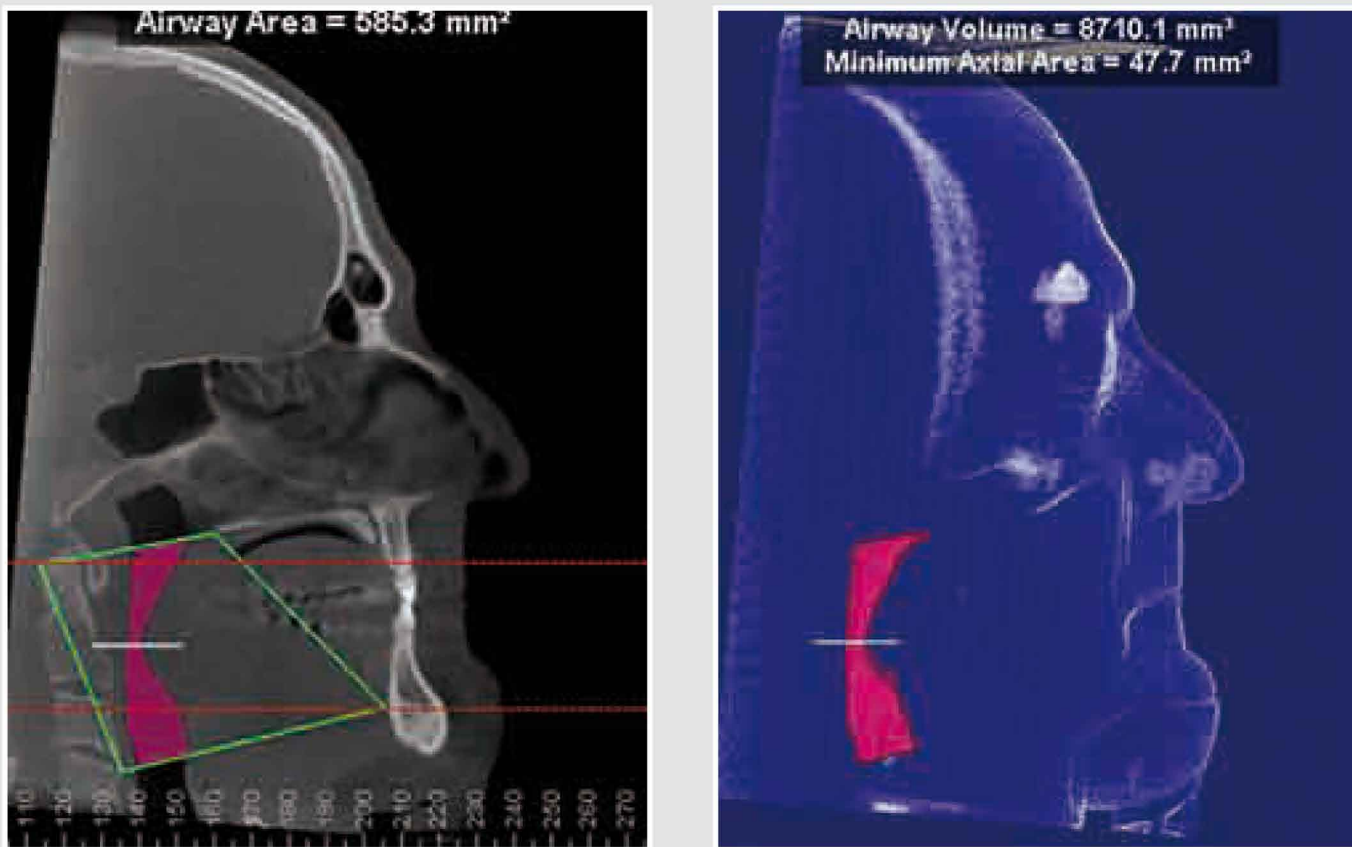


**Figure 5.** Cephalometry patient at rest.

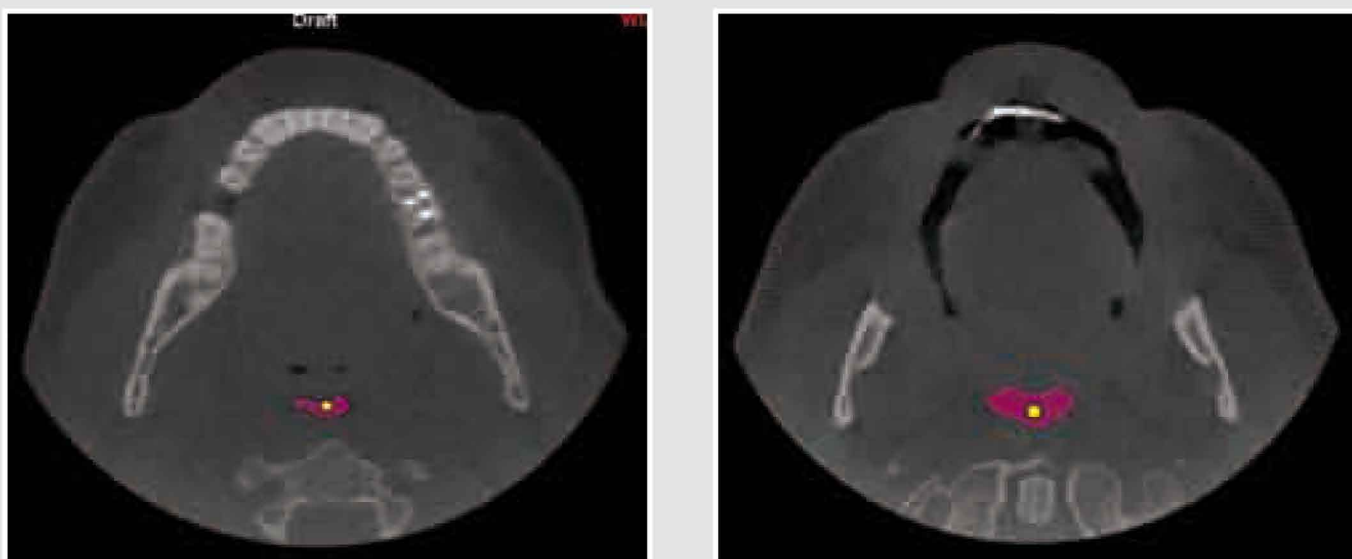


**Figure 6.** Cephalometry patient in overtaking.

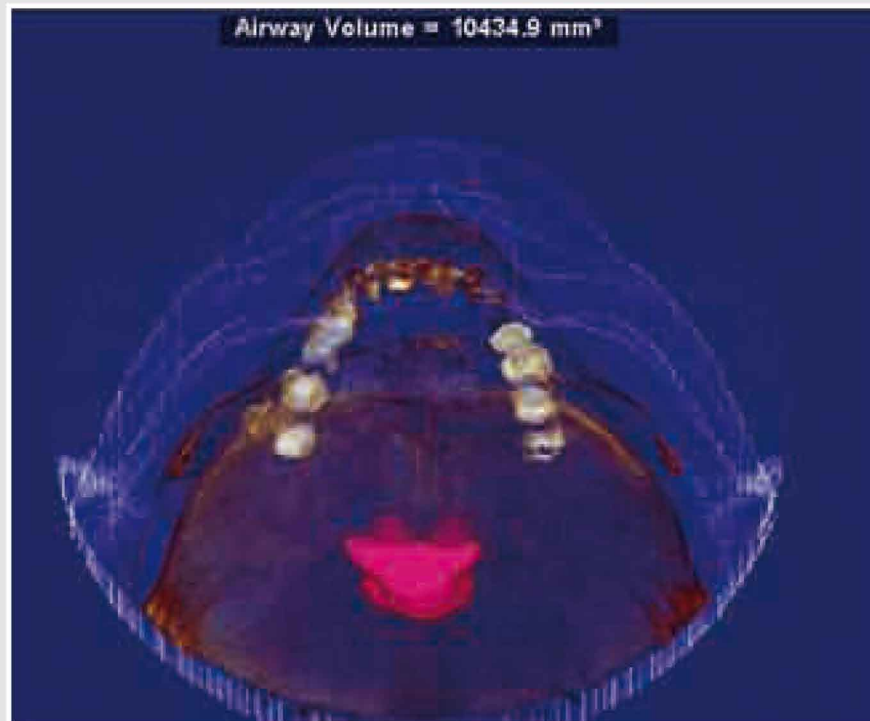
Airways Scanner (Fig. 7): A marked increase in the volume of the airways in overtaking with the orthoap-  
nes device in place.



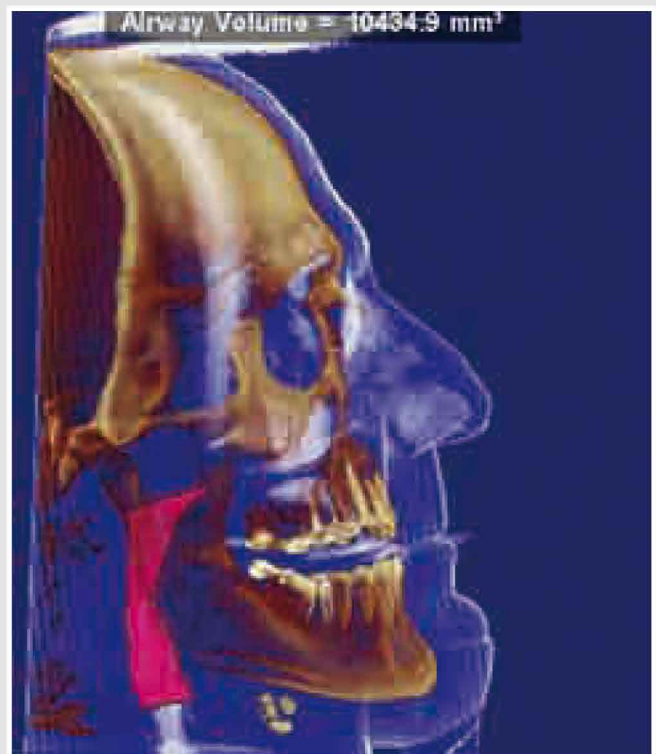
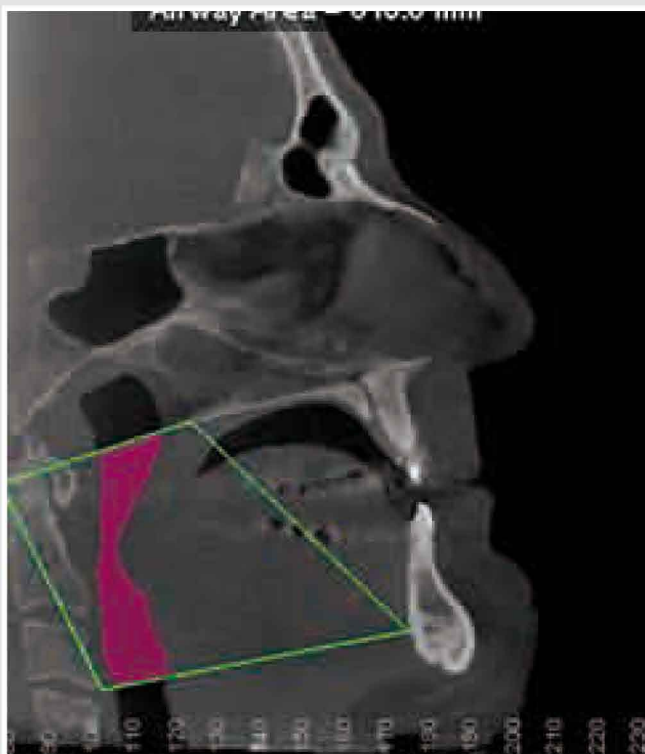
**Figure 7.** Airways scanner. Demarcation of the boundaries. Volume and minimum diameter.



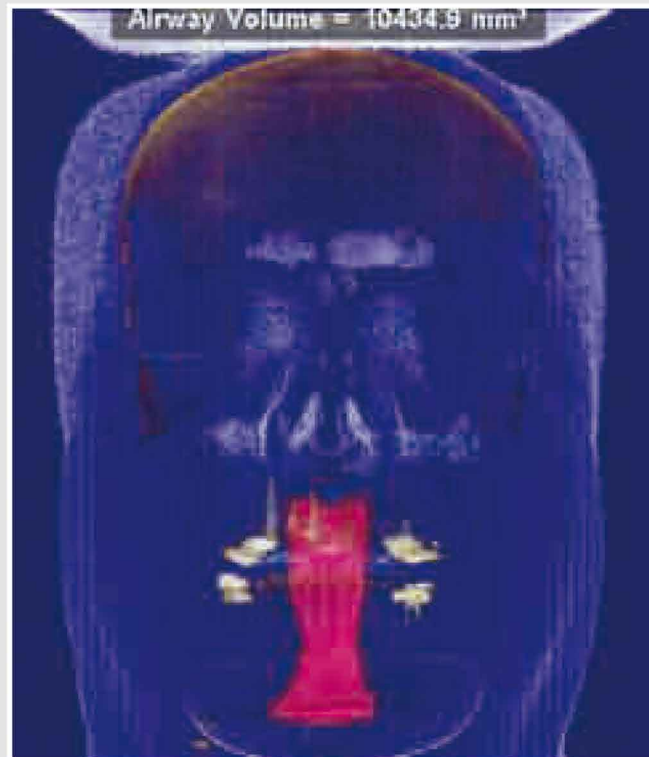
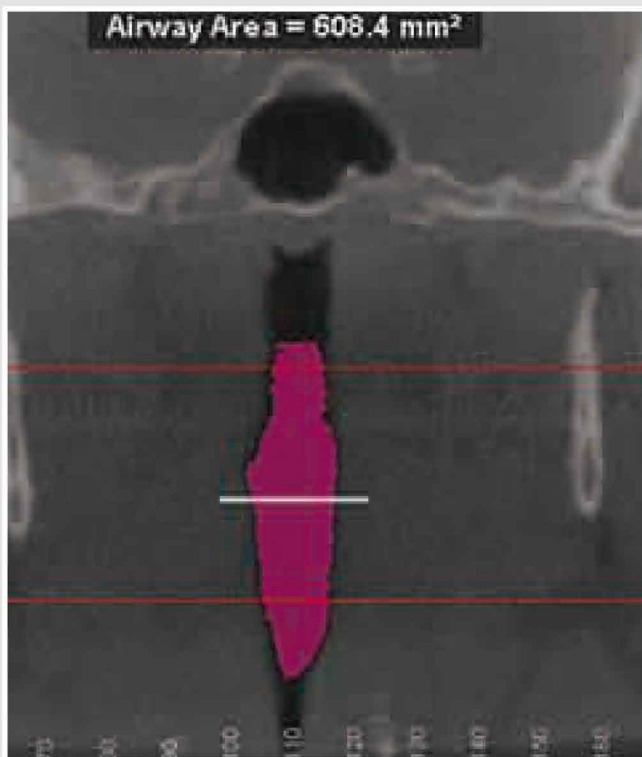
**Figure 8.** Scanner with transversal sections, beginning and advancing with Orthoapnea. Note the increase in the section of the UA.



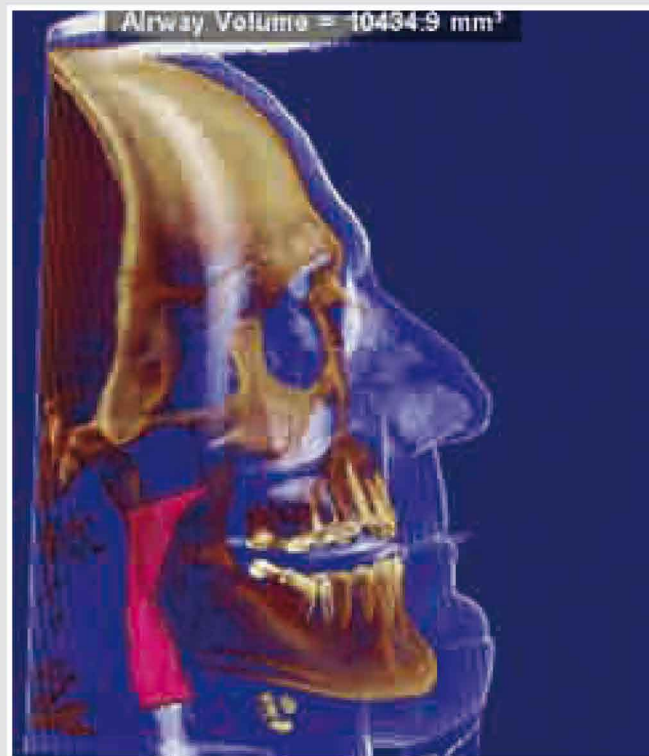
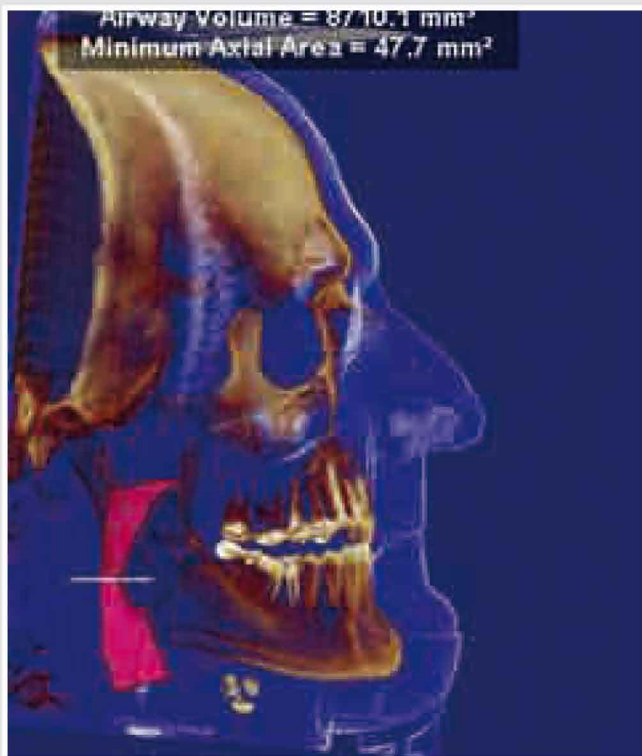
**Figure 9.** I-CAT scanner, cross-section in advance with Orthoapnea.



**Figure 10.** Sagittal view progress.

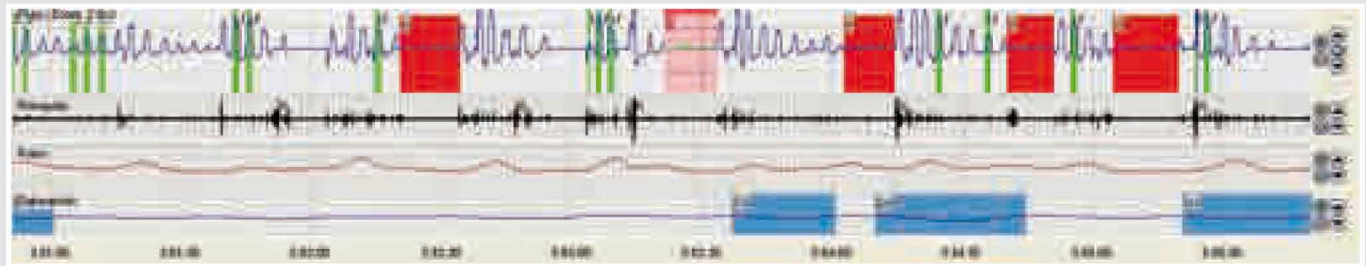


**Figure 11.** Frontal view. Without and with Orthoapnea.



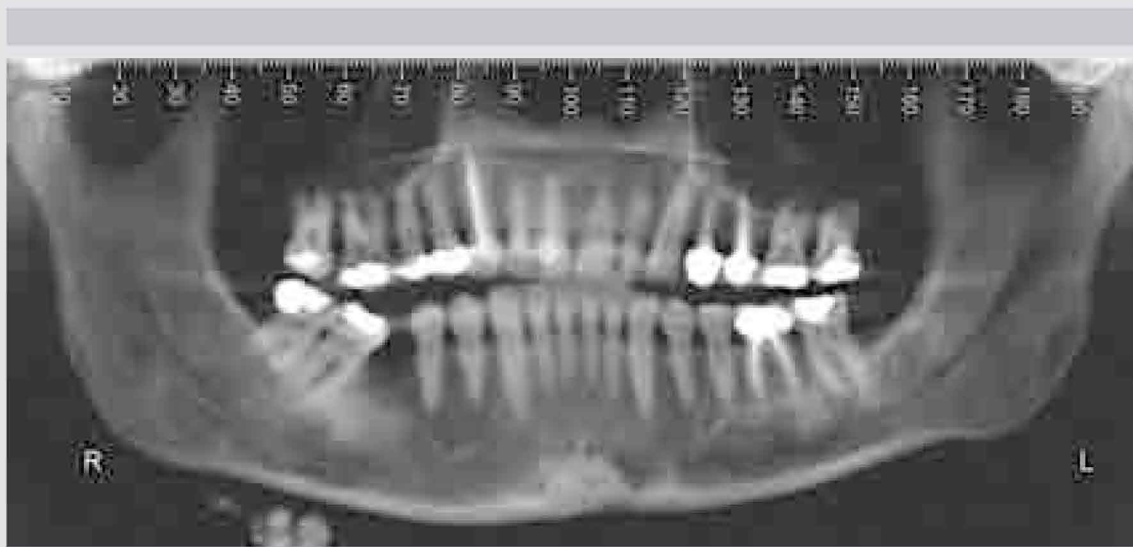
**Figure 12.** Sagittal view. Without and with Orthoapnea. Note a large increase in the volume of the airways (from 8710.1 to 10434.9 mm<sup>3</sup>) to progress through Orthoapnea.

*Policardiográficos records:* showed multiple episodes of apnea-hypopnea accompanied by desaturation (Fig. 13).



**Figure 13.** PSG pre-treatment with Orthoapnea.

*The oral examination is normal with multiple root canals and restorations, scanning of the ATM is normal* (Fig. 1).



**Figure 1.** Orthopanthogram.

After two weeks of use with the apparatus of Orthoapnea we make a record again PCG, a fall in AHI and ODI = 15 = 15. (Fig. 14) and a decrease in the obstructive respiratory pattern with a smaller number of apneas hypopneas with desaturation.



**Figure 14.** PSG after treatment with Orthoapnea.

The symptoms of snoring disappeared and hypersomnolence decreased significantly (Epworth Scale 5).

**Comments:** This is a patient with an apnea-hypopnea from mild, mild to moderate, class I, normal weight, which has failed CPAP therapy because of intolerance by stating Orthopanea apparatus with good prognosis and outcome. The results of the i-CAT scanner made with Orthoapnea show a significant increase in the volume of these to advance the mandible which is indicative of good prognosis of the treatment applied.



**Figure 15.** Patient with prosthetic Orthoapnea.