7.4) mm Hg p=0.042. There was no difference in blood pressure in men who withdraw CPAP vs. controls.Augmentation index was higher in men who withdraw CPAP vs. controls 2.1 (0.01 to 4.2) p=0.049, and pulse wave velocity tended to be higher 0.30 (0.00 to 0.61) p=0.052. There was no effect on arterial stiffness in women.Apnea-hypopnea index and Epworth sleepiness scale were significantly higher in both women and men who withdraw CPAP.

Conclusions: Nocturnal blood pressure increases in women after CPAP withdrawal, and augmentation index increases in men as a sign of increased arterial stiffness increases after CPAP withdrawal. These gender differences are novel and needs attention.

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Insomnia

RISK PERCEPTIONS AND BELIEFS ABOUT BENZODIAZEPINES IN AUSTRALIAN USERS

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Introduction: Benzodiazepines are widely prescribed in patients with insomnia. These medications have potential for harm, given their alertness impairing effect. Despite provision of alerts and warnings, many benzodiazepine users continue to ignore safety messages and use benzodiazepines inappropriately. Our study aimed to explore risk perception patterns and medication related beliefs of benzodiazepine users.

Materials and methods: This study involved a point of purchase survey with patients obtaining benzodiazepines from selected pharmacies across New South Wales (NSW), Australia. Survey items included questions about patient's demographic characteristics and their reason for taking benzodiazepines. Validated scales such as the Insomnia Severity Index (ISI), and Beliefs about Medication (BMQ) as well as customised scales assessing risk perception were included in the survey. Data obtained from the surveys was entered into the SPSS package and was then descriptively analysed.

Results: 55 participants (64% females) with a median age of 52.8 years (range 23 to 86 years) have been recruited so far. The ISI scores indicated that about 30% of the study population had clinical insomnia at the time of survey completion. For 70% of participants, the benzodiazepine use period was ^{3}1 year. About 25.5% and 47.3% of the participants perceived that driving a motor vehicle within 3-4 hours and 12 hours of taking benzodiazepines respectively are 'not risky at all'. Responses on the BMQ scale highlighted that 43.6% of the participants agreed that benzodiazepines are *necessary* for their present health. However, 40% of the participants were *concerned* about the long-term effects of benzodiazepine and 36.4% were worried about developing dependence. The recruitment process is ongoing.

Conclusions: Long-term use of benzodiazepine remains high in the Australian population. Inappropriate risk perceptions, for example, about driving a car after taking benzodiazepines clearly place users at risk. Patients concerns and beliefs about taking benzodiazepines can be used to reduce current chronic consumption. More effective information about the risks of using these readily prescribed medications is necessary along with the need to promote better long term behavioural interventions.

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Sleep Breathing Disorders

IMPORTANCE OF THE LINGUAL REEDUCATION BY THE TONGUE RIGHT POSITIONER ON THE UPPER AIRWAYS PERMEABILITY IN YOUNG ORTHODONTIC PATIENTS

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Introduction: Orofacial Myology therapy is known to induce a transverse expansion of the maxilla. It also increases nasal permeability and divides by two the number of hypopnea/apnea events per hour. Nevertheless, such treatment may be affected by low compliance, which may affect these results. Systematization of treatment with a well-tolerated device makes it possible to reinforce compliance. We wanted to verify that the lingual reeducation associated with the Tongue Right Positioner (TRP) induces the enlargement of the maxillary transverse direction, as well as the improvement of the nasal permeability and the pharyngeal diameter.

Materials and methods: 37 orthodontic patients 11.3 ± 2.4 years old were included in this study. All patients received TRP treatment for an average of 16.7 ± 2.1 months. Measurements of oro and velo-pharynx diameters from head radiographs and Peak Nasal Inspiratory Flow (PNIF) were carried out before TRP setting, the day of its removal and on average 7 months later. In parallel, we measured the maxillary molar/molar distance on dental casts performed before the TRP setting and after its removal.

Results: At the end of the TRP treatment, the anteroposterior diameters of the velo and the oropharynx increased significantly by 12.4% and 12.0%. In parallel, PNIF increased by 37.5% and the molar-molar distance increased by 3.9%. All these increases were remanent approximately 7 months after the TRP was deposited. All patients have completed their TRP treatment.

Conclusions: Lingual reeducation with a TRP increases and stabilizes transverse expansion of the maxilla and has rapid and persistent beneficial effects on nasal permeability and the anteroposterior diameter of the pharynx. Compliance to TRP treatment is high. The TRP device could be an interesting alternative for treating respiratory sleep disorders.

Sleep Breathing Disorders

EFFECTS OF RENAL SYMPATHETIC DENERVATION ON APNEA-HYPOPNEA INDEXES AND ECG VARIATIONS FOR RESISTANT HYPERTENSIVE PATIENTS

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Introduction: Renal sympathetic denervation (RSD) is an effective management of drug-resistant hypertension. Discussion continues and data are being collected within controlled experiments in order to assess the efficiency of the RSD as a therapeutic method of sleep-related breathing disorders (SRBD).

Materials and methods: The effect of RSD on SRBD is evaluated utilizing data acquired in collaboration with the project "RELIEF"—"Renal Sympathetic Denervation for the Management of Chronic Hypertension" (FNUSA-ICRC, 2011-2012). Out of 28 subjects a study and a control group were formed. The study group underwent renal artery angiography in order to exclude stenosis and, in parallel, also underwent the RSD. For the control group only angiography to exclude stenosis was performed. Polysomnography (PSG) of all subjects was performed in the ICRC Cardiovascular Sleep Laboratory one day before the catheter intervention ("Measurement 1") and repeated after 6-9 months ("Measurement 2"). A digital PSG records were acquired and. PSG reports followed AASM (American Academy of Sleep Medicine) methodology. During the PSG a three-channel ECG was continually recorded. The PSG records were evaluated by sleep specialists. Two aspects were studied, namely: (1) the effect of the RSD on apnea-hypopnea indexes (total, central, and obstructive) and (2) ECG changes occurring within SRBD.

Results: The RELIEF project made it possible to successfully recruit suitable groups of subjects for this PSG study. PSG results were obtained for 17 (60,7% of total involved) subjects in the study group and for 8 in the control group (28,6% of total). It proved useful that Measurement 2 followed Measurement 1 in approx. half a year (mean: 195 days, min: 178, max: 224). This period allowed detecting substantial differences in apnea-hypopnea indexes. All indexes for the subjects in the control group increased substantially after the above specified period. On the other hand, the apnea-hypopnea indexes for the study group seem to have different trends. The obstructive AHI seems to get lower with time while the central AHI seems to be growing. The total AHI for the study group seems to remain stable. Furthermore, some initial results were obtained for the ECG changes accompanying the SRBD. The recorded ECG amplitude and