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 were 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 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 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

EFFECTS OF RENAL SYMPATHETIC DENERVATION ON APNEA-HYPOPEAN 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” (FNSU-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 evaluated and PSG reports followed AASM 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 apnoea-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 AHF seems to get lower with time while the central AHF seems to be growing. The total AHF 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