levothyroxine therapy. The purpose of this study was to assess the association between dyslipidemia and hypothyroidism.

Materials and methods: The aim of this study was to evaluate the lipid profile of patients with different degrees of hypothyroidism. Initially, a cross-sectional study was performed with 96 participants [manifest hypothyroidism (MH) = 47 participants, and euthyroidism (EU) = 49 participants]. Women with manifest hypothyroidism and euthyroid women were enrolled in this study.Their lipid profile, fasting blood sugar, T3,T4 and TSH levels were measured and various parameters were compared.

Results: Correlation study revealed a significant positive correlation between Lp(a) and TSH levels in hypothyroid patients.

Conclusion: Thyroid dysfunction can have an important effect on lipid profile. Biochemical screening for thyroid dysfunction is critical in all dyslipidemic patients.

These results show that hypothyroidism is Associated not only with elevated serum levels of LDL-C but also with elevated serum Lp(a) concentrations.

Key words: hypothyroidism, dyslipidemia, lipid profile gim.

40. EXPERIMENTAL MODEL O F ATRIAL FIBRILLATIO N INDUCED BY TRANSESOPHAGEAL CARDIAC PACING

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Introduction. Atrial fibrillation (AF) is the most frequently encountered cardiac arrhythmia in clinical practice. Several studies demonstrated that pacing-induced rapid atrial rates result in sustained non-valvular atrial fibrillation, but this finding has been considered to be restricted to large animal models, while small rodents are generally considered refractory to such arrhythmias due to their small cardiac mass. The aim of our study was to develop an experimental model of spontaneous AF in rats using transesophageal cardiac pacing.

Material and Methods. Seven 15-week-old male Wistar rats were implanted with radiotelemetry devices to dynamically record ECG signals over 24-h. After 2 weeks of post-surgical recovery, three of the rats (AF group) were submitted to daily transesophageal cardiac pacing. Burst pacing was performed using 20 consecutive cycles of 30 sec (rate: 4,000 bpm, voltage: 14-16), with 5 min of recovery between the stimulation cycles. After 5 consecutive days of cardiac pacing, a 24-h ECG recording was performed in the rats from the AF group, as well as in the four rats assigned to the control (C) group. All arrhythmic events were analysed with dedicated software.

Results. During the cardiac pacing protocol, a total of 9 AF episodes were observed, with the highest incidence in the last day of stimulation. The first arrhythmic event was recorded in the third day of the study. All three stimulated rats presented at least one episode of stimulation-induced AF. On the 24-h ECG recordings, rats from the AF group presented a total of 76 atrial arrhythmic events, including

37 atrial extrasystoles (AES), 33 atrial couplets, and 6 short episodes of spontaneous, non-sustained AF, whereas only 10 arrhythmic events (i.e., 6 AES and 4 atrial couplets) and no AF episodes were observed in the C group.

Conclusions. The onset and the persistence of reentrant arrhythmias have been shown to depend on a minimum tissue mass. Accordingly, such arrhythmias have generally been considered to be restricted to large animal models. The present data demonstrate that spontaneous, non-sustained AF can be easily induced by rapid transesophageal atrial pacing in small rodents, providing a new experimental model for the study of the electrophysiological mechanisms involved in AF genesis.

Keywords: experimental model, rats, atrial fibrillation, transesophageal cardiac pacing.

41. CLINICAL CHARACTERISTICS OF HEADACHE IN PITUITARY ADENOMAS

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Introduction: The prevalence of pituitary adenomas is 10.6%, most of them presenting with headache. Pituitary adenomas bear an important risk of generating severe consequences, such as endocrinological complications or pituitary apoplexy. Thus, highlighting clinical features of headache Associated with pituitary adenoma would provide invaluable information needed to enable the practicing physician to suspect this condition.

Materials and methods:13 patients with pituitary adenomas were analysed. Data were collected regarding the clinical features of headache, the radiologic appearance of the tumour and its endocrine activity. Clinical features of heradache in piruitary adenomas were described, and a comparative analysis between the headache phenotype in micro- and macroadenomas was performed.

Results: Our results showed that pituitary adenomas are Associated with headache which is moderate to severe in intensity (6.3 points) and frequent (5 days per week). At the same time, a higher frequency of migraine in the patients with microadenoma was found, while the proportion of tension-type headache in the groups of patients with macro-and microadenoma was comparable.

Conclusion: Our study provided some insights into the phenotypic characteristics of headache Associated with pituitary adenomas. We also found that migraine was more strongly Associated with an underlying microadenoma as a cause.

Keywords: pituitary, adenoma, headache, headache phenotype.