- IV. Train mental health care providers on basic human rights/patient-provider communication;
- V. Control/improve the basic conditions for patients at the mental health care hospitals/dispensaries, including food, bedding, and recreation time/facilities;
  - VI. Increase patients'/caregivers' awareness of their rights and standards of care;
  - VII. Ensure social protection mechanisms for people with mental health disorders.

## 38. EPIDEMIOLOGY OF PERIODIC LIMB MOVEMENT DISORDER

#### Elena Furdui

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**Introduction:** Periodic limb movement disorder (PLMD) is characterized by periodic episodes of repetitive and highly stereotyped limb movements that occur during sleep, affecting the lower limbs, lasting 0,5 to 5 seconds and the pause between the episodes is about 20-40 seconds. Purpose of the study is studying the scientific literature about the prevalence of periodic limb movement disorder in different disorders.

**Materials and methods**: There were studied about 50 articles about the prevalence of periodic limb movement disorder.

**Disscussion results**: Periodic limb movement disorder is freequently encountered among sleep disorders. Its prevalence is about 3,9% to 6% in general population. The prevalence in persons of age upper than 60 is 34%. In children periodic limb movements prevalence is 7,7%. In patients with sleep obstructive apnea, periodic limb movements prevalence is about 4-5%. In patients with insomnia periodic limb movement disorder is encountered in about 1 to 15 % of all patients.

**Conclusions**: Periodic limb movement disorder is a disorder with a high prevalence in general population. An appropriate clinical approach is still discussed. PLMD is freequent encountered in different pathologies and this finding may give a solution in finding a proper clinical approach.

**Key words**: Periodic limb movement, epidemiology, obstructive sleep apnea.

### 39. HYPOTHYROIDISM AND DYSLIPIDEMIA

#### **Ecaterina Pitel**

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**Introduction:** Hypothyroidism is a relatively common endocrine disorder usually accompanied with changes in serum lipid profiles. Recent studies consistently demonstrate elevated levels of serum total cholesterol, low-density lipoprotein cholesterol (LDL-C), apolipoprotein B, lipoprotein(a), and possibly triglycerides in individuals with overt hypothyroidism, all of which are reversible with

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 OF ATRIAL FIBRILLATIO N INDUCED BY TRANSESOPHAGEAL CARDIAC PACING

## Doina Ghertescu, Elena Andreea Manescu, Teodor Grigoras

Scientific adviser: Marcel Perian, Lecturer; Alina Scridon, Associate Professor, University of Medicine and Pharmacy Targu Mures, Romania

**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