Restless legs syndrome in patients with Poliomyelitis

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Restless legs syndrome (RLS) (Willis-Ekbom disease)

- is characterised by:
  - variable degrees of unpleasant sensations deep inside the legs
  - occurring especially at rest and during the night
Characteristics of RLS

1. an urge to move the limbs with or without sensations
2. improvement with activity
3. worsening at rest
4. worsening in the evening or night.

A positive therapeutic response to dopaminergic drugs also supports the diagnosis of RLS.
• 5–10% is referred by the general population
Short communication

Restless legs syndrome in post-polio syndrome: A series of 10 patients with demographic, clinical and laboratorial findings

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Objective:

• To study frequency and severity of RLS in PM
• and the effect of treatment with dopaminergic drugs.
method

• 52 PM patients (56 ± 6.3 years) (29 ♀ / 23 ♂)

• 39 of 52 (72%) patients had post-polio syndrome
Method

• After clinical diagnosis of RLS, treatment with pramipexol (Mirapexin) was started at 0.18 mgr and the patients were revised two months after initiation of treatment.
Result:

• RLS was observed in 21 patients in 52 PM patients (40.4%)
• and symptoms predominantly in the affected limb (90% of patients)
• 16 of the 21 patients (76.2%) with RLS had pPS, similar in the non-RLS group (74.2% had pPS)
## Restless Legs Syndrome Rating Scale

Have the patient rate his/her symptoms for the following ten questions.
The patient and not the examiner should make the ratings, but the examiner should be available to clarify any misunderstandings the patient may have about the questions.
The examiner should mark the patient's answers on the form.

### In the past week...

1. **Overall**, how would you rate the RLS discomfort in your legs or arms?
   - (4) Very severe
   - (3) Severe
   - (2) Moderate
   - (1) Mild
   - (0) None

2. **Overall**, how would you rate the need to move around because of your RLS symptoms?
   - (4) Very severe
   - (3) Severe
   - (2) Moderate
   - (1) Mild
   - (0) None

3. **Overall**, how much relief of your RLS arm or leg discomfort did you get from moving around?
   - (4) No relief
   - (3) Mild relief
   - (2) Moderate relief
   - (1) Either complete or almost complete relief
   - (0) No RLS symptoms to be relieved

4. How severe was your **sleep disturbance** due to your RLS symptoms?
   - (4) Very severe
   - (3) Severe
   - (2) Moderate
   - (1) Mild
   - (0) None

5. How severe was your **tiredness or sleepiness during the day** due to your RLS symptoms?
   - (4) Very severe
   - (3) Severe
   - (2) Moderate
   - (1) Mild
   - (0) None

6. How severe was your RLS as a whole?
   - (4) Very severe
   - (3) Severe
   - (2) Moderate
   - (1) Mild
   - (0) None

7. How often did you get RLS symptoms?
   - (4) Very often (8 to 7 days in a week)
   - (3) Often (4 to 5 days in a week)
   - (2) Sometimes (2 to 3 days in a week)
   - (1) Occasionally (1 day in a week)
   - (0) Never

8. When you had RLS symptoms, how severe were they on average?
   - (4) Very severe (8 hours or more per 24 hour)
   - (3) Severe (3 to 8 hours per 24 hour)
   - (2) Moderate (1 to 3 hours per 24 hour)
   - (1) Mild (less than 1 hour per 24 hour)
   - (0) None

9. **Overall**, how severe was the impact of your RLS symptoms on your ability to carry out your daily affairs, for example carrying out a satisfactory family, home, social, school or work activities?
   - (4) Very severe
   - (3) Severe
   - (2) Moderate
   - (1) Mild
   - (0) None

10. How severe was your **mood disturbance** due to your RLS symptoms - for example angry, depressed, sad, anxious or irritable?
    - (4) Very severe
    - (3) Severe
    - (2) Moderate
    - (1) Mild
    - (0) None

### Sum of scores =

Scoring criteria are: Mild (score 1-10); Moderate (score 11-20); Severe (score 21-30); Very severe (score 31-40)

1. Answers for this IRLS are scored from 4 for the first (top) answer (usually 'very severe') to 0 for the last answer (usually none). All items are scored. The sum of the item scores serves as the scale score.

The International Restless Legs Syndrome Study Group holds the copyright for this scale.
16 patients before treatment

- 5 very severe RLS
- 10 severe RLS
- 1 moderate RLS

Severity of RLS according to RLS rating scale
Severity of RLS according to RLS rating scale

- Very severe RLS
- Severe RLS
- Moderate RLS
- Mild RLS
- No symptoms

With treatment:
- 1 severe RLS
- 2 moderate RLS
- 9 mild RLS
- 4 without any symptoms of RLS
RLS rating scale: 28.3±4.7 to 6.9±7.3

p<0.001
Discussion

1. RLS is frequent in patients with PM (40.4%)
2. those patients should be identified and appropriately treated.
3. They have a good response to the treatment.
Thermal and mechanical hyperalgesia in PM

Alteration in somatosensory pathway (Kumru, Portell et al., Clin Neurophysiol 2013)
Thank You very much