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## Reduced interoception abilities in patients with Restless Legs Syndrome

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*Introduction:* Restless legs syndrome (RLS) is a complex sensorimotor disorder occurring with a typical circadian fashion [1]. Association with additional features, like alexithymia and nocturnal compulsive behaviors further complicates the framework [2-4]. Some evidence suggests that alexithymia, impaired nocturnal sleep and eating disorders might share reduced interoception [5-7], a construct not yet investigated in RLS patients.

*Objective:* To assess interoception in RLS.

*Methods:* 25 RLS patients (mean age: 62.04 ± 16.70 years; 15 females) and 28 matched controls (mean age: 54.50 ± 14.47; 16 females) underwent the Heartbeat counting task (interoceptive accuracy, IAC) [8]. RLS symptoms' frequency, disturbance and duration, nocturnal behaviors, interoceptive awareness (IAW) [9], alexithymia, depressive and anxiety symptoms were also collected.

*Results:* RLS patients showed significant lower IAC ($p=0.0003$) and IAW ($p=0.012$) compared to controls, and reported more nocturnal eating behaviors ($p<0.001$). IAC positively correlated with IAW ($R=0.32$), and negatively correlated with age ($R=-0.58$). Nocturnal eating behaviors negatively correlated with IAC ($R=-0.44$) and IAW ($R=-0.50$).

*Conclusions:* RLS patients presented reduced interoceptive abilities correlating with higher nocturnal eating behaviors. Future studies are needed to explore the role of interception in RLS pathophysiology, also in relation to other sensorimotor aspects.

**References:**

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