

## ROLE OF ROTIGOTINE, A DOPAMINERGIC MODULATOR, IN THE MANAGEMENT OF PHARMACORESISTANT DEPRESSED PATIENTS

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**Introduction:** Pharmacoresistant depression is a challenging clinical condition faced daily by psychiatrists. Although several strategies have been tried to optimize the outcome of this condition, depressive symptoms management remains difficult. Serotonin is regarded as the target neurotransmitter of mood regulation while other monoamines are considered as secondary characters in symptoms management although their role has not been fully explored.

**Objectives:** Verify the role of dopaminergic modulation in management of pharmacoresistant depression.

**Aims:** Aim of our study is to evaluate the role of a dopaminergic treatment in pharmacoresistant depression management by administration of transdermal rotigotine.

**Methods:** Pharmacoresistant depressed patients, with a stabilized antidepressant treatment and in lack of symptomatic improvement in last six weeks, underwent a clinical trial with transdermal rotigotine, up to 4 mg/day. Symptoms were evaluated at the beginning of treatment and after one month by three validated scales: Hamilton Depression Scale (HAMD), Hamilton Anxiety Scale (HAMA) and Global Assessment of Functioning (GAF).

**Results:** Ten patients (9 F / 1 M; mean age 48,1 yrs) fulfilled inclusion criteria in the roll-in period. The mean scores before rotigotine treatment were: 22.80±5.8 for HAMD, 25.9±4.9 for HAMA and 41.4±11.62 for GAF. After one month of treatment with rotigotine, scores respectively changed in 11.3±3.3 (t=5.76; p< 0.001), 17.2±1.5 (t=6.37; p< 0.001) and 58.3±4.7 (t=-4.24; p=0.002).

**Conclusions:** Dopaminergic modulation achieved by rotigotine improved mood, motor and anxiety and global functioning scores, in lack of any side effect. In particular, transdermal administration avoided drug plasmatic peaks related to side effects.