

**P02-334 - FUNCTIONAL NEURAL CORRELATES OF MINDFULNESS MEDITATIONS AND A COMPARISON WITH PSYCHOTHERAPY, PHARMACOTHERAPY AND PLACEBO: IS THERE A LINK?**

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**Objective:** Mindfulness meditations (MM) are a group of meditation practices which are recently receiving growing attention. Following the increasing interest towards the neural correlates of meditation, particularly Mindfulness meditations (MM), the aim of the present work is to review current findings about the neural correlates of MM and compare such findings to those of further specific and non specific treatments.

**Methods:** A literature search was undertaken using MEDLINE, ISI web of knowledge, the Cochrane database and references of retrieved articles. Studies which focused on the functional neural correlates of MM, psychotherapy, pharmacotherapy and placebo published up to August 2009 were screened by the reviewers in order to be considered for the inclusion.

**Results:** Main findings suggest that long term MM practice could allow a more flexible emotional regulation by engaging frontal cortical structures to dampen automatic amygdala activation when it is needed. A great overlap could exist between cerebral areas activated during MM, psychotherapy, pharmacotherapy and those activated by expectancy in placebo studies. However, while MM, psychotherapy and placebo could act through a top-down regulation, antidepressants could act through a bottom-up process.

**Conclusion:** MM could target specific brain areas related to emotions and emotional regulation. Consistent similarities could exist between MM and other interventions, particularly psychotherapy. Despite these promising findings, however, further research is needed in order to extend current findings, to more deeply compare MM to other treatments and to better investigate the neurochemical correlates of MM.