

Antidepressants and Psychotherapy: Produce Similar Changes in Brain Activity

WESTPORT, CT (Reuters Health) July 23 - Antidepressants and psychotherapy, when used to treat major depressive disorder, appear to affect brain activity in similar ways, according to the findings of two studies reported in the July issue of the *Archives of General Psychiatry*.

In one study, Dr. Arthur L. Brody, from the University of California at Los Angeles, and colleagues studied metabolic changes in the brains of 24 patients with major depressive disorder who were treated with paroxetine (Paxil) or interpersonal psychotherapy. Sixteen normal subjects were scanned for comparison.

Prior to treatment, patients had higher activity in the prefrontal cortex and lower activity in the temporal lobe than control subjects. With treatment, however, these metabolic changes tended to normalize. Depression scores improved more in the paroxetine-treated group than in the psychotherapy group, but both groups experienced similar changes in metabolic activity.

In another study, Dr. Stephen D. Martin, from the Cherry Knowle Hospital, Sunderland, UK, and colleagues evaluated brain blood flow changes in 28 patients with major depressive disorder who were treated with venlafaxine hydrochloride (Effexor) or interpersonal psychotherapy.

Both treatment groups experienced a substantial improvement in their depression scores compared with baseline values. Both groups demonstrated increased basal ganglia blood flow, while only the psychotherapy group showed increased limbic blood flow.

In an editorial, Dr. Harold A. Sackeim, from the New York State Psychiatric Institute in New York City, comments that "despite the specifics of the regional changes that were identified, both studies found that the changes in functional brain activity following pharmacotherapy and psychotherapy were remarkably similar."

Dr. Sackeim states that "it is conceivable that a unitary pathway or set of pathways is involved in the relief of depressive symptomatology." He notes that "at the broadest level, this would suggest that despite different pharmacological profiles, antidepressant agents ultimately act on selective and specific functional circuits in exerting therapeutic action." Preliminary evidence suggests that this may also hold true for psychotherapy, he adds.

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