Is Clinical Response to Tricyclic Antidepressants in Functional Bowel Disorders Related to Dosage?

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A recent, multicenter trial conducted at the University of North Carolina has indicated that Desipramine is effective in treating patients with moderate to severe functional bowel disorders (Drossman *at al*, Cognitive-Behavioral Therapy vs. Education and Desipramine vs. Placebo for Moderate to Severe Functional Bowel Disorders Gastroenterology 2003). The UNC team conducting this trial was headed by Dr. Drossman and Dr. Whitehead. Also participating in the study was a University of Toronto team, led by Dr. Brenda Toner and Dr. Nicholas Diam.

The optimal dose of Desipramine needed to treat patients with functional bowel disorders is still unknown. Clinical experience suggests that patient's symptoms can improve significantly, even while taking doses lower than those needed to treat depression.

In order to determine whether there is a correlation between the Desipramine dose and improvement in symptoms, a second study (using data from in the main study) was performed. The researchers evaluated patients who took either Desipramine or a placebo, and correlated their clinical response to the number of pills they were taking. Clinical improvement was defined as a combination of factors, including patient's satisfaction with care, global well-being, and quality of life.

The analysis confirmed that there is no correlation between the dose of Desipramine and clinical improvement. This finding indicates that although some patients may require higher doses of Desipramine, even small doses of Desipramine may be effective in treating functional gastrointestinal disorders in other patients. The treatment can therefore be started with a small dose and increased gradually, according to the clinical response and to potential side effects. There was also no correlation found between Desipramine dose and blood levels of the medication. Thus, unless toxicity is suspected, it appears that monitoring the Desipramine blood levels has no clinical value.