Psychosocial Factors in IBS: Toward a More Comprehensive Understanding and Approach to Treatment

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The treatment of functional GI disorders must include not only traditional physical clinical care but also an assessment of and focus on the psychological issues that may relate to these disorders. Studies at DDW 2003 have looked at the following aspects.

THE RELEVANCE OF PSYCHOLOGICAL ISSUES

Although most patients with IBS do not meet criteria for psychological disorders, considerably higher rates of IBS are found in patients with psychiatric diagnosis. However, it is not clear whether psychiatric disorders precede a diagnosis of IBS or is a consequence of it. Dr. Stuart C. Howell and colleagues at the University of Sydney performed a study of Australian subjects for their first 26 years of life to determine the connection between psychiatric disorders and IBS. By age, 16.7% met the Manning criteria for IBS. IBS was not found to be more common among individuals with 26 chronic psychiatric disorders such as depression and anxiety. The study concluded that in young adults IBS is related to personality but not to a history of psychiatric disorder. There are, however, some limitations to consider. The study followed 869 subjects, but since only 145 of those met the IBS criteria, the actual number of patients that could be studied was relatively small. This could lead to findings that lack statistical power. IBS was defined categorically and from a population database, where subjects are more likely to have a milder illness. It is probable that psychiatric disorder would be found more often in those with more severe symptoms and a higher usage of health care. In addition, other psychological factors such as social support and coping style were not studied.

POSSIBLE MECHANISMS

Several studies at DDW offered insights on possible mechanisms by which psychological distress may affect patients’ illness and behavior. Britta Dikhaus and colleagues, from UCLA conducted a study that looked at the effect of auditory induced psychological stress on sensitivity and emotional responses to rectal balloon distension in the esophagus. The study tested IBS patients whose predominant symptom is diarrhea as well as normal individuals who do not have IBS. In the IBS group, relatively to controls, the induced psychological stress was associated with increased sensitivity and a stronger emotional response. In the control group of normal subjects, this association was not observed.

In another study, Lloyd J. Gregory from the United Kingdom looked at changes in brain activation in response to esophageal distension when given either of two tasks: a) a visual (distracting) task and b) focusing attention to the esophageal stimulus. There was greater brain activation when subjects were asked to concentrate on the esophageal stimulus rather when they did the visual task. The study concluded that conscious selective attention to
the esophagus during esophageal stimulation results in more brain activation than when the esophageal stimulus is present but the person is distracted. The effect of psychological factors on IBS sufferers (on patient status, illness severity, and outcome of their disorder) provides the rationalization for using treatments directed towards modifying attention to gastrointestinal sensations and changing the way they are interpreted, as occurs in cognitive behavior therapy.

**PSYCHOTROPIC DRUG TREATMENT**
The effectiveness of antidepressant treatment in IBS patients has recently been reported. Antidepressants are also frequently used for a variety of other functional GI symptoms and syndromes. A meta-analysis by Dr. Ray E. Clouse from the University of Washington, St. Louis has shown a significant beneficial effect of antidepressants for the following functional gastrointestinal disorders: IBS, functional esophageal symptoms, functional dyspepsia, and abdominal pain. The odds ratio (the percentage of people on active drug who get better divided by the percent on placebo) benefit exceeds 4 when compared with placebo. Nevertheless, comparative, controlled studies between the different antidepressant classes are still missing.

**PSYCHOLOGICAL TREATMENTS**
Several psychological treatment interventions have been suggested for the treatment of IBS. These include active psychotherapeutic treatments (Cognitive Behavioral Therapy, Dynamic or interpersonal therapy) as well as more passive treatments (hypnosis or Progressive Muscle Relaxation). Cognitive Behavioral Therapy (CBT) involves the patient working with a therapist to address specific concerns and perceptions about their functional gastrointestinal symptoms. These are then modified in ways that lead to changes in cognitive appraisal of stress, which in turn impacts, the patient's bowel symptoms. Phillip M. Boyce et al reported the results of a study that compared the benefit of CBT, Relaxation Therapy, and Routine Medical Care in IBS patients. A significant improvement in The Bowel Symptoms Severity Scale, Hospital Anxiety, and SF-36 Physical Scores were found at the end of eight weeks. Also, additional improvement occurred at 10 months of follow up with no treatment. Interestingly there were no differences between the three treatment groups, meaning all three were equally effective. The investigators concluded that routine medical care, with an emphasis on education and reassurance, could be as effective as CBT and relaxation in reducing symptoms and improving quality of life. This conclusion should be regarded with caution since these results are not consistent with several recently published papers showing a beneficial effect of CBT in patients with IBS. The discrepancies between studies might be related to the different patient populations with regard to their illness severity or to a failure of the particular therapy done in this study to be effective. No process measures were reported to determine if there was indeed evidence that the CBT Treatment to more effective thinking.

Additional studies with larger samples of patients selected by their severity, and using standardized CBT treatments along with measures to assess CBT effect are needed. Dr. Francis H. Creed from the University of Manchester, in the United Kingdom, conducted a study to explore the cost-effectiveness of combining psychotherapy and SSRI antidepressants treatment for severe irritable bowel syndrome. Patients were randomized into one of three treatments: a) 7 sessions of individual psychotherapy, b) 20mgs daily of paroxetine, c) or routine medical care. After one year, psychotherapy and antidepressant were superior to routine care in reducing disability in IBS patients. However, there were no differences, among the groups, in terms of GI symptoms themselves after 3 month or one year follow-ups. In Creed's study, health related quality of life improved during treatment more for psychological and SSRI antidepressants groups than for the routine care group. All groups showed improvement in quality of life at the one-year follow-up. Finally, health care costs were similar for all groups by 3 months follow-up, but by the end of one year, the psychotherapy group consumed significantly fewer health costs than the other two groups. This suggests that patients continue to benefit with psychotherapy over time, and this is related to reduced health care costs. Hypnotherapy is another non-pharmacological treatment for IBS. Peter Whorwell's group at the University of South Manchester have shown the efficacy of hypnotherapy in improving
symptoms, quality of life, and more recently the long term treatments of functional dyspepsia. The results of a randomized controlled study, by Emma L. Calvert, in which patients either received hypnotherapy, conventional treatment with ranitidine 150mg twice daily, or supportive therapy for 16 weeks showed that the improvements in functional dyspepsia were similar between the 3 groups. However, long-term hypnotherapy was superior to other treatments in improving the quality of life and in reducing the need for medication. Another study presented by Giuseppe Chiarioni from Verona, Italy showed increased gastric emptying in response to hypnotic relaxation with gut-oriented suggestions in healthy controls and patients with functional dyspepsia. Again the effect was greater in patients who received hypnotherapy than with Cisapride. The efficacy of hypnotherapy warrants additional studies. The variety of studies presented at DDW 2003 reflects the continuous change in the way functional disorders are conceptualized and the growing acceptance and understanding of these disorders. Continued researches in this area will contribute to the improvement of our care for patients with functional disorders.