

Hypnosis Treatment of Irritable Bowel Syndrome

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The Mind and IBS

The standard medical methods currently used to treat irritable bowel syndrome (IBS) are of some help to the majority of people with the disorder. However, up to half(1) of IBS sufferers are dissatisfied with the results of standard medical management, and many continue to have frequent symptoms after seeing doctors about them.

In recent years, other alternatives have been sought to help these individuals. There has been growing interest in the possibility of using the mind to soothe the symptoms of IBS. Mental states clearly affect the way the gut behaves in people with IBS, and in fact, also in people who have no gastrointestinal problems. Although IBS is probably not caused by stress directly, it is well established from research that psychological stress increases the symptoms of many people who have the disorder. If the mind can have such a powerful negative influence on the intestinal tract, it would seem to make sense that the mind could be used to have a positive or calming influence on the intestines.

Several psychological methods to treat IBS symptoms have been tested in formal research studies, including biofeedback, cognitive therapy, psychodynamic (insight-oriented) therapy, and hypnosis treatment. It is unclear, to date, which of these psychological treatment methods is most effective, for they have generally not been tested side by side. However, cognitive therapy(2,3) and hypnosis treatment(4-7) have had the highest reported success rates in repeated formal research studies, with improvement seen in 80% or more of all treated patients in some studies. Hypnosis treatment will be discussed specifically in this article.

Hypnotherapy

Clinical hypnosis is a method of inducing and making use of a special mental state where the mind is unusually narrowly and intensely focused and receptive. In such a state, verbal suggestions and imagery can have a greater impact on a person's physical and mental functioning than otherwise is possible. Unlike the popular portrayal of hypnosis in movies, on television, or in stage entertainment, a clinical hypnotherapist does not use any power over the person who is hypnotized. The only power at work in clinical hypnosis is the power the patient has to enter and make use of this special mental state. The treatment is comfortable, and generally without any negative side effects for psychologically sound individuals. The person who is hypnotized is typically fully aware of everything that happens under hypnosis both during and after the hypnosis session.

Research has demonstrated that hypnosis can be used to have various effects on gastrointestinal functioning. It can slow down the propulsive movement of material through the intestinal tract(8), can increase or decrease acid secretion

in the stomach(9), can sometimes reduce or eliminate nausea and vomiting(10), and can reduce the relapse rate of duodenal ulcers(11) and improve long-term management of functional dyspepsia(12).

Hypnosis for IBS

The results of the first formal research study(4) on hypnosis treatment for IBS were published in the *Lancet* in 1984. The investigators, Dr. Peter Whorwell and his group in Manchester in England, reported remarkable success from a seven-session hypnosis treatment of 15 patients with severe IBS problems who had not responded to any other treatment. All 15 patients treated with seven sessions of hypnotherapy improved, with dramatic improvement seen in all the central symptoms of IBS.

The researchers furthermore showed that this therapeutic impact was not merely due to belief or expectancy of improvement, because a comparison group of 15 IBS patients who were instead treated with the same number of psychotherapy sessions and also received placebo pills (pills with no medication) showed only slight improvement. This was a powerful demonstration of the impact hypnotherapy could have on IBS, and led to considerable subsequent interest in this approach to IBS treatment.

Since this first report, more than a dozen other published research reports have confirmed that hypnosis treatment is effective in treating IBS. Generally, the treatment procedures reported in the literature consists of 4 to 12 sessions (shorter treatment than 7 sessions may be a bit less effective). Hypnosis sessions are typically conducted weekly or once every other week, last 30-40 minutes and consist of induction of hypnosis followed by deep relaxation and the use of gut-directed imagery and suggestions. Patients are commonly given short audiotape hypnosis home exercises to use during the course of treatment in addition to the sessions with the clinicians.

The experience to date may be outlined as follows:

- Reported success rates range from approximately 70-95% in all studies with any significant number of patients [for example, in the work of the Manchester group in England(4,5,13) and our studies(6,7)].
- The improvement enjoyed from this treatment often lasts at least two years after the end of treatment(5).
- All major IBS symptoms improve from this kind of treatment (abdominal pain, diarrhea/constipation, and bloating).
- There are some indications that individuals with certain characteristics are somewhat less likely to benefit from this kind of treatment(5,7,13): People with very little hypnotizability (perhaps 15-25 % of all people), persons with psychiatric disorders, and maybe (according to one report) males with diarrhea-predominant type of IBS.
- This treatment can be effective also when people are treated in groups(14).

- In addition to effects on physical symptoms, the treatment commonly improves psychological well-being and life functioning substantially(6,7,13,15) and can have long-term positive effects in reducing disability and health care costs and improving the quality of life of IBS patients(15).

How hypnosis treatment improves IBS symptoms

Although it is by now well established that hypnosis treatment often improves the symptoms of IBS, it remains a mystery exactly how hypnosis influences IBS in such a beneficial way. Our research team has conducted two studies to try to shed some light on this issue, using completely standardized seven-session protocol with written hypnosis scripts where all treated patients receive the same exact hypnosis treatment word for word.

Our first study(6), which was the first hypnosis group trial for IBS in the U.S., was conducted in Dr. Whitehead's research laboratory at the University of North Carolina at Chapel Hill in 1995-1996. In this study, we sought to understand how the treatment influenced the intestinal tract, by measuring changes in rectal pain sensitivity and gut muscle tone with a computerized balloon inflation test. We found no significant changes in pain sensitivity or muscle tone in the gut after hypnosis treatment. However, 17 of the 18 treated patients, all of whom had unsuccessfully tried conventional treatment methods, rated their IBS symptoms significantly improved after treatment.

It should be noted that the Manchester group has also conducted two studies to examine the changes in the gut after hypnosis treatment. They similarly found no overall changes in gut pain sensitivity (although in one study(16) a subgroup of the most pain-sensitive individuals showed reduced sensitivity) nor muscle tone changes after treatment, even though the clinical symptoms of their patients improved.

We conducted our second study(7) at Eastern Virginia Medical School in Norfolk, Virginia, to examine whether the effects of the hypnotherapy on IBS could be explained by treatment changes in nervous system activity, and also to test further our standardized treatment protocol. Twenty-four people with severe IBS were treated with our standard protocol, and we measured the activity of the autonomic nervous system (the part of the nervous system that automatically controls the body's inner functions) in various ways before and after treatment. We measured sweat gland activity, heart rate, blood pressure, skeletal muscle tension, and skin temperature in the participants, both at rest and in response to a standard mental stress task (problem-solving under time pressure).

Twenty-one of the 24 patients (87.5%) treated in the study improved

substantially and maintained their improvement at 10-month follow-up. The only change we saw after hypnosis treatment in the nervous system data, however, was a small reduction in sweat gland activity, suggesting somewhat lessened physical stress. This seemed to be unrelated to the much larger improvement in clinical symptoms from the treatment, and could not account for the mechanism of improvement. In contrast, we did find that patients had greatly reduced experience of general (non-IBS) bodily symptoms after treatment, and this was statistically related to their improvement of IBS symptoms. This suggests that changes in the mind's interpretation of, or attention to, signals from the body play some role in the improvement.

The overall conclusion from our work and the studies of the Manchester group is that we still know relatively little about exactly what makes the hypnosis treatment so effective for IBS, in spite of four studies examining that to date. We plan to continue doing research to address that question.