

Implementation of gut-directed hypnotherapy

for Irritable Bowel Syndrome in clinical practice

AKADEMISK AVHANDLING

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Avhandlingen baseras på följande delarbeten:

- I.** Lindfors P, Unge P, Arvidsson P, Nyhlin H, Björnsson E, Abrahamsson H, Simrén M. Effects of gut-directed hypnotherapy on IBS in different clinical settings- results from two randomized, controlled studies. *Am J Gastroenterol.* 2012; 107(2):276-85
- II.** Lindfors P, Unge P, Nyhlin H, Ljótsson B, Björnsson E, Abrahamsson H, Simrén M. Long-term effects of hypnotherapy in patients with refractory irritable bowel syndrome. *Scand J Gastroenterol.* 2012;47(4):414-20
- III.** Lindfors P, Ljótsson B, Björnsson E, Abrahamsson H, Simrén M. Patient satisfaction after gut-directed hypnotherapy in Irritable Bowel Syndrome *Neurogastroenterol Motil.* 2012. Oct 5. [Epub ahead of print]
- IV.** Lindfors P, Törnblom H, Sadik R, Björnsson E, Abrahamsson H, Simrén M. Effects on gastrointestinal transit and antroduodenojejunal manometry after gut-directed hypnotherapy in Irritable Bowel Syndrome. *Scand J Gastroenterol.* 2012. Oct 10 [Epub ahead of print]

ABSTRACT

Implementation of gut-directed hypnotherapy for Irritable Bowel Syndrome in clinical practice.

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Background: Irritable Bowel Syndrome (IBS) is characterized by recurrent abdominal pain or discomfort, related to abnormal bowel habits. This benign and common condition is in severe cases associated with bothersome GI symptoms, decreased quality of life and psychological comorbidity. Many cases can be treated with lifestyle advice and symptom modifying drugs. However, the severe cases are very difficult to treat and no effective medicines targeting the whole symptom complex are currently available. Gut-directed hypnotherapy has been found effective in many refractory cases, but the majority of the studies concerning the effects of this intervention originate from specialized, hypnotherapy research units.

Aims of the thesis: To evaluate the effects of gut-directed hypnotherapy as treatment in refractory Irritable Bowel Syndrome (IBS), when the intervention is delivered outside specialized, hypnotherapy research units and to investigate if there are permanent effects on GI motility after treatment with gut-directed hypnotherapy in IBS.

Material and methods: The patients studied in Paper I - Trial 1, Paper III and Paper IV were from a large randomized controlled trial (RCT), performed in Gothenburg (n=90). In Paper I - Trial 2 the patients came from a smaller RCT, performed in Gävle (n=48). The patients studied in Paper II, came from these RCTs, but a large clinical sample from Stockholm (n=134) was also included. All patients were treated with gut-directed hypnotherapy once a week for 12 weeks by specially trained psychologists. In Paper I we evaluated the short and medium term effects of gut-directed hypnotherapy, whereas the long-term effects of the intervention were assessed in Paper II. In Paper III, factors associated with patient satisfaction after gut-directed hypnotherapy was investigated and in Paper IV, we measured permanent effects of hypnotherapy on GI motility.

Results: In the RCTs (Paper I), the intervention was found to be effective in decreasing IBS symptoms, reducing the level of anxiety and increasing some domains of quality of life. The results were significant in within-group analysis in both Trial 1 and 2, but in the latter there was no significant difference compared to the control group (probably due to a type II error). In Paper II, 49% of the patients were considered as responders directly after treatment and 73% of these patients had continued to improve at follow-up (mean 4 years after treatment). The responders also reported a significantly reduced healthcare utilization at follow-up. Of all treated patients (n=208), 87% reported that they had found hypnotherapy to be worthwhile (100% of responders, 74% of non-responders), confirming the clinical impression that many patients are satisfied with the intervention even in the group with little effect on GI symptoms. This was further investigated in Paper III where patients reported their satisfaction on a 5 degree scale, ranging from 1 (not at all satisfied) to 5 (very satisfied). Sixty-nine percent of the patients scored 4 or 5 on this scale, and when dividing patients into responders and non-responders, 52% of the responders, but also 30% of the non-responders reported that they were very satisfied (score 5) with the intervention. Patient satisfaction was found to be associated with improvement of quality of life and GI symptoms, but only one domain of quality of life was independently associated with patient satisfaction (sexual relations). In Paper IV, we evaluated the results of small bowel manometry and GI transit investigations before and after the intervention, but no permanent effects of gut-directed hypnotherapy on GI motility were detected.

Conclusions: Gut-directed hypnotherapy is an effective treatment in refractory IBS, even when delivered outside specialized hypnotherapy research centres. Besides effects on GI symptoms, there are positive effects on quality of life parameters and anxiety. The effect on GI symptoms is long-lasting and the intervention is generally associated with a high grade of patient satisfaction, even in subjects with no or minor effect on GI-symptoms. Patient satisfaction is associated with improvements in GI symptoms and quality of life but other factors are probably also of importance and need to be further investigated. The result also implicates a potential to reduce healthcare costs when treating IBS patients with hypnotherapy. We found no evidence that the mechanism of action behind the effects of gut-directed hypnotherapy is due to effects on GI motility. The results in this thesis support the introduction of gut-directed hypnotherapy as a part of clinical care in treating patients with refractory IBS

Key-words: Irritable bowel syndrome, gut-directed hypnotherapy, patient satisfaction, GI motility