COGNITIVE-BEHAVIORAL HYPNOTHERAPY IN THE TREATMENT OF IRRITABLE-BOWEL-SYNDROME-INDUCED AGORAPHOBIA

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Abstract: There are a number of clinical reports and a body of research on the effectiveness of hypnotherapy in the treatment of irritable bowel syndrome (IBS). Likewise, there exists research demonstrating the efficacy of cognitive-behavioral therapy (CBT) in the treatment of IBS. However, there is little written about the integration of CBT and hypnotherapy in the treatment of IBS and a lack of clinical information about IBS-induced agoraphobia. This paper describes the etiology and treatment of IBS-induced agoraphobia. Cognitive, behavioral, and hypnotherapeutic techniques are integrated to provide an effective cognitive-behavioral hypnotherapy (CBH) treatment for IBS-induced agoraphobia. This CBH approach for treating IBS-induced agoraphobia is described and clinical data are reported.

Irritable bowel syndrome (IBS) is a functional disorder that includes symptoms such as diarrhea and/or constipation, gas, bloating, pain, cramps, a sense of urgency about having to move one’s bowels, frequent bowel movements, and a feeling of incomplete evacuation. Medical treatments are not very effective in treating IBS.


Cognitive-behavior therapy (CBT) has also been found to be effective in the treatment of IBS (Bennett & Wilkinson, 1985; Blanchard, Greene, Scharff, & Schwarz-McMorris, 1993; Drossman, Toner, et al., 2003; Fernandez, Perez, Ámigo, & Linares, 1998; Heyman-Monnikes, Arnold, Florin, Herda, Melfsen, & Monnikes, 2000; Shaw, Srivastava, 131
Sadlier, Swann, & James, 1991; Toner, Segal, Emmott, & Myran, 2000). Several studies have found that CBT alone was effective in treating IBS (Greene & Blanchard, 1994; Payne & Blanchard, 1995). The results for hypnotherapy and CBT hold up over time. Gonsalkorale, Miller, Afzal, and Whorwell (2003) found that improvement was maintained 5 years after treatment for 81% of the IBS patients who responded to hypnotherapy. The other 19% reported only minimal relapse. Blanchard, Schwarz, and Neff (1988) report that 2 years after the completion of CBT, 82% of the IBS patients showed improvements on global reports, and Schwarz, Taylor, Scharff, and Blanchard (1990) report 90% rates of improvement on global reports after 4 years. Although Blanchard (2005), in his review of the research literature, notes that there were some studies that did not find CBT to be superior to medical and placebo treatments, overall he concludes that there is "ample evidence" indicating that both hypnotherapy and CBT are effective in treating IBS. Whitehead (2006) in his review concluded that hypnosis has a high degree of success with IBS (success rates ranging from 61% to 100%) and that therapeutic gains are maintained over time.

Probably, the reason why hypnosis and relaxation techniques are effective in treating IBS is because changes throughout the gastrointestinal (GI) tract are affected by stress and relaxation. There is evidence that stress and anxiety affect bowel function and IBS (Bennet, Tennant, Piesse, Babcock, & Kellow, 1998; Drossman, Sandler, Mckee, & Lovitz, 1982; Sykes, Blanchard, Lackner, Keefer, & Krasner, 2003; Welgan, Meshkinpour, & Hoehler, 1985). Several studies have demonstrated physiological changes in the GI tract as a result of hypnosis (Klein & Spiegel, 1989; Simren, Ringstrom, Bjornsson, & Abrahamsson, 2004; Whorwell, Houghton, Taylor, & Maxton, 1992).

The debilitating effects of IBS have been documented (Whitehead, Burnett, Cook, & Taub, 1996). Anxiety disorders, especially generalized anxiety disorder, have been found to be common in IBS patients (Blanchard, Scharff, Schwarz, Suls, & Barlow, 1990; Sykes et al., 2003). Keefer and colleagues (2005) have noted that IBS patients with diarrhea are likely to worry about access to bathrooms, to be afraid of having accidents, to avoid eating in public, and to avoid going places where there is limited access to toilets. Nevertheless, there is no information about whether any of the patients in any of the research studies had agoraphobia or panic attacks. Given the fears and worries of IBS patients, it is surprising that there is a lack of information about agoraphobic IBS patients.

The IBS patients described in this paper had high levels of anxiety about loss of control of their bowels. Some of them had panic attacks as a result of fearing loss of control. Typically, they developed agoraphobia after having had one or several experiences of feeling a sense of urgency while in situations such as subway trains, crowded buses,
sports events, theaters, restaurants, stuck in traffic, or in long lines waiting to use a bathroom. Subsequently, they started to avoid public transportation, social situations, or any place where they feared they could be trapped and have uncontrollable diarrhea. Their avoidances became habitual and pervasive. These IBS patients fit the criteria for Diagnostic and Statistical Manual of Mental Disorders (4th edition) (DSM-IV; American Psychiatric Association, 1994) diagnoses, panic disorder with agoraphobia (300.21) and agoraphobia without panic (300.22). In addition, the diagnosis of psychological factors affecting a medical condition (316.0) is justified, as most of the patients also reported that anxiety exacerbated their IBS symptoms. Agoraphobic IBS patients may need to be treated differently than nonphobic IBS patients. Treatment effectiveness for patients with IBS-induced agoraphobia may depend on whether they receive interventions that address their phobias and panic symptoms in addition to their IBS symptoms.

The IBS patients I’ve treated may be different than those participating in some of the research studies. Perhaps phobic IBS patients are too afraid to participate in research studies that take them into social situations far from their homes. Instead, they may seek out individual therapy close to home. In support of the possibility that the patient population seen in at least some research programs is less anxious, and less phobic, than the patients I’ve seen, Keefer et al. (2005) found only mild levels of anxiety in the IBS patients seeking treatment from their research program. On the other hand, some of the patients treated and described by Gonsalkorale (2006) seem similar to agoraphobic IBS patients, although she does not diagnose them as such. Gonsalkorale does note that some of her patients were afraid and avoidant of travel.

With the exception of Gonsalkorale (2006) and Golden (2006), there is little written about the integration of CBT and hypnotherapy in the treatment of IBS. Although Gonsalkorale does not identify her treatment as cognitive-behavioral hypnotherapy (CBH), she includes CBT techniques such as imagery rehearsal, where patients imagine themselves without their IBS symptoms in previously feared and avoided situations. Gonsalkorale also includes breathing retraining and some cognitive interventions in the treatment package. In 2006, I described an integration of hypnosis and CBT that included systematic desensitization in the treatment of an agoraphobic IBS patient.

The rationale for combining CBT with hypnosis in treating IBS-induced agoraphobia is that each component of the treatment package provides specific and unique therapeutic value. The CBH program I’ve used includes cognitive and behavioral strategies that have been found to be effective in the treatment of phobias, panic disorder, and IBS. The program includes cognitive therapy, systematic desensitization, breathing retraining, and hypnosis.
Systematic desensitization, which involves imaginal and/or in vivo (in life) exposure to feared and avoided situations, is a behavior-therapy technique originally developed by Wolpe (1958). Systematic desensitization has been found to be effective in treating fears and phobias (Bandura, 1969; Paul, 1969). CBT, with and without systematic desensitization, has been found to be effective in the treatment of fears and phobias including agoraphobia and panic disorder (Craske, 1991; Dolan, 1996; Salkovskis & Clark, 1991; Sanderson & Rego, 2000). Gould, Otto, and Pollack (1995) found on the basis of their meta-analysis of 48 controlled studies that CBT was a highly effective treatment for panic disorder with agoraphobia. More than 80% of the patients, in most of the studies they reviewed, were panic-free.

TREATMENT PROTOTYPE BASED ON EMPIRICAL EVIDENCE AND THEORETICAL FOUNDATION

Cognitive-Behavioral Hypnotherapy

CBH involves the integration of CBT and hypnosis, which share a number of commonalities that make for a natural integration of the two approaches. For example, imagery and relaxation are common to both hypnosis and CBT. On the basis of their research, Barber and his associates have concluded that the same cognitive processes are involved in hypnosis and CBT (Barber, 1979; Barber, Spanos, & Chaves, 1974; Spanos & Barber, 1974, 1976). Benson, Arns, and Hoffman (1981) concluded, on the basis of their research comparing self-hypnosis and relaxation techniques, that both of these techniques elicit the relaxation response.

Wolpe (1958) originally used hypnosis as part of systematic desensitization to reduce patients’ anxiety during exposure to feared situations. He reports that he switched to Jacobson’s (1929) progressive relaxation technique because many of his patients objected to being hypnotized. Nevertheless, systematic desensitization via hypnosis has been found to be effective in the treatment of phobias (Marks, Gelder, & Edwards, 1968).

Kirsch, Montgomery, and Sapirstein (1995) in their meta-analysis of 18 studies in which CBT was compared to CBH (the same CBT treatment with hypnosis added) concluded that hypnosis enhances the effectiveness of CBT. Schoenberger (2000) reached similar conclusions on the basis of a review of the literature. Gibbons, Kilbourne, Saunders, and Castles (1970) and Hussain (1964) report that the addition of hypnosis enhances the effectiveness of systematic desensitization. Schoenberger, Kirsch, Gearan, Montgomery, and Pastyrnak (1997) report that hypnosis enhanced the effectiveness of CBT for public-speaking anxiety in their study. However, Spanos and Barber (1976) point out that the Gibbons et al. study in particular, and studies of this type in general, confound the addition of a hypnotic induction with
the addition of fear-reducing suggestions. Spanos and Barber hypothesize that it is the addition of the fear-reducing suggestions and not the hypnotic induction procedure that is responsible for the increased effectiveness of systematic desensitization. According to Spanos and Barber, the reason why suggestions enhance the effectiveness of CBT techniques, such as systematic desensitization, is because they provide the patient with a cognitive strategy. In support of the Spanos and Barber hypothesis, Woody and Shauble (1969) found that the addition of fear-reducing suggestions without a hypnotic induction enhanced the efficacy of traditional desensitization. The reason why fear-reducing suggestions enhance the effectiveness of systematic desensitization may be the same reason why coping self-statements enhance the effectiveness of systematic desensitization.

Goldfried (1971) and Meichenbaum (1972) demonstrated that applying a coping-skills approach to systematic desensitization improved its efficacy. In the coping-skills approach, patients learn how to use relaxation techniques and coping self-statements for the purpose of reducing their anxiety during imaginal and in vivo exposures. Patients are encouraged to mentally rehearse their coping self-statements while imagining themselves coping with stressful situations.

Fear-reducing suggestions and coping self-statements are both cognitive strategies that patients can use for reducing anxiety. There is some evidence that adding cognitive interventions to hypnotherapy increases its effectiveness. Boutin and Tosi (1983) found that rational stage-directed hypnotherapy, which is a CBH approach that combines hypnosis and CBT strategies, was more effective than hypnosis alone in the treatment of test anxiety.

Regardless of whether the enhanced effects observed in CBH are attributable to hypnotic induction or cognitive strategies, from a clinical perspective the integration of CBT and hypnosis provides a more effective treatment approach than either one alone. Further, there may be phenomenological differences that are significant in determining how various patients respond. Barber (1978) has said that when hypnotic induction is helpful, it is because of the individual’s expectation or belief in the efficacy of the procedure.

**STAGES OF COGNITIVE-BEHAVIOR HYPNOTHERAPY**

In CBH, five stages of treatment can be differentiated:

1. **Orientation.** History-taking and assessment take place, expectations are assessed, patients are educated about hypnosis, and misconceptions about hypnosis are clarified.
2. **Hypnotic induction.** A hypnotic induction procedure is selected and is used.
3. *Deepening of hypnosis*. Following a hypnotic induction, one or several deepening techniques are used.

4. *Utilization of hypnosis*. During hypnosis, therapeutic interventions are utilized, such as systematic desensitization.

5. *Termination of hypnosis*. Using one of several methods, the therapist terminates the hypnosis session and the patient returns to a fully alert state.

In traditional hypnotherapy, patients are tested for hypnotic susceptibility during the orientation stage. However, there are patients who do not respond well to testing, although they are responsive to a hypnotic induction. An alternate approach is to not engage in any hypnotic susceptibility tests and to just proceed with a hypnotic induction after establishing rapport. Another alternative is to teach hypnotic skills. Hypnotic-skills training is based on the premise that hypnotic responsiveness is a learnable skill. The therapist teaches the patient how to respond to suggestion. In their research, Diamond (1974, 1977) and Katz (1979) have demonstrated that hypnotic responsiveness can be improved through hypnotic-skills training. For a complete transcript of a hypnotic-skills training procedure, the reader is referred to Golden, Dowd, and Friedberg (1987).

Relaxation Techniques and Hypnotic Induction Procedures

Various relaxation and hypnotic induction techniques can be combined to create a procedure that is tailored to the needs and preferences of a given patient. The patient collaborates with the therapist in the decision making about which hypnotic induction and relaxation techniques to employ. Instead of using standardized images, patients are encouraged to create their own relaxation images. Getting patients involved increases the likelihood that they will be responsive and will follow through and use the techniques on their own as part of self-hypnosis. Individualized tape recordings are made for each patient for the purpose of facilitating self-hypnosis training. For detailed descriptions of various hypnotic induction procedures and deepening techniques, the reader is referred to Golden et al. (1987). For guidelines in selecting which hypnotic induction procedure to use with a particular patient, the reader is referred to Golden (1986).

All patients are given breathing retraining because it is an extremely important technique in controlling panic attacks and IBS symptoms, especially when hyperventilation is involved. With diaphragmatic breathing, the abdominal area rises during inhalation and flattens during exhalation. Patients are instructed to breathe slower (approximately 4 seconds to inhale and 4 seconds to exhale) and to breathe in and out through their nose. For more information about breathing retraining in the treatment of hyperventilation, panic disorder, and agoraphobia, see Fried and Golden (1989).
SELF-HYPNOSIS

Self-hypnosis provides patients with a set of coping skills. As part of their self-hypnosis training, patients are taught to use hypnotic-induction procedures, deepening techniques, and hypnotic suggestions. I use several methods for teaching self-hypnosis. I give patients scripts that they can memorize or use for making tape recordings in their own voice. They are also taught the basic skills of hypnosis (relaxation, imagery, suggestion) via hypnotic skills training, and they are encouraged to experiment and to develop a personalized technique. Patients are taught how to use self-hypnosis to prepare themselves for anxiety-producing situations. During self-hypnosis, they mentally rehearse coping with the upcoming stressful event. I also teach patients to apply their self-hypnosis skills on an as needed basis and encourage them to apply these skills during in vivo exposure. For a detailed description of these methods of self-hypnosis training, see Golden et al. (1987).

Utilization of Hypnosis: Systematic Desensitization

Stages of systematic desensitization. The desensitization approach that I use involves five stages:

- Behavioral assessment and hierarchy construction
- Cognitive therapy
- Hypnosis and relaxation training
- Gradual exposure to feared situations through imagery rehearsal and the use of therapeutic suggestions given during hypnosis
- In vivo gradual exposure to feared situations

Hierarchy construction. Systematic desensitization provides patients an opportunity to confront their fears in a gradual manner, one step at a time. Care is taken to make sure that a patient experiences success with one step before proceeding to the next step. Relaxation techniques and hypnotic suggestion are used to reduce anxiety during a patient’s exposure to the feared situations. As part of behavioral assessment, the specific situations that evoke anxiety are identified. An anxiety hierarchy is then constructed. The patient’s fear or phobia is broken down to specific anxiety-producing situations, which are then rank ordered from least to most anxiety-producing and can be graded on a scale from 1 to 100, where 100 is the most anxiety-provoking situation. Desensitization can be done in imagination via hypnosis. In vivo homework assignments are given following successful imaginal desensitization experiences. Below is an example of an anxiety hierarchy that was used in the treatment of an agoraphobic IBS patient. The items and their ratings were as follows:

1. Short drive in car, close to home: 25
2. Eating in a restaurant, near home: 30
Cognitive therapy. The basic concept in cognitive therapy is that it is not just the activating event or stimulus that causes emotional disturbance, but that cognitions cause or contribute to maladaptive emotions (Beck, 1967; Ellis, 1962). In cognitive therapy, patients are taught to identify and to modify maladaptive cognitions. Therapeutic suggestions, developed through cognitive-therapy techniques such as the two-column method, can be used during imaginal desensitization for the purpose of anxiety reduction. These hypnotic suggestions are used in essentially the same way as the coping thoughts are used in CBT.

The two-column method. The two-column method is the main cognitive-therapy technique that I use for formulating hypnotic suggestions. This method is very easy for patients to learn and to use on their own. The patient is instructed to divide a page in half vertically. On the left side of the page, patients list their anxiety-producing thoughts. On the right side of the page, therapeutic suggestions are listed. The goal is to generate a set of hypnotic suggestions that can be used during systematic desensitization and for self-hypnosis.

Table 1 is an example of the two-column method used for generating some of the hypnotic suggestions for the agoraphobic IBS patient whose anxiety hierarchy was described above.
Imaginal desensitization. Therapeutic suggestions for reducing anxiety can be developed for each item of a patient’s anxiety hierarchy. After relaxation is induced, the therapist describes an item from the patient’s hierarchy and offers therapeutic suggestions. For example, following a hypnotic induction procedure, these suggestions were given to the patient whose hierarchy and two-column method were described above:

Now, imagine sitting in a center seat in a crowded movie theater, feeling calm and in control . . . realizing people get out of their seats during a movie to go to the bathroom all the time. . . . So can you . . . and now imagine yourself getting up . . . calm and relaxed . . . feeling in control.

Before proceeding to the next hierarchy item, the therapist makes sure that the patient is ready to proceed. Ideomotor signaling can be used. The therapist can ask, “If you feel ready to proceed with the next item, you can let me know by gently nodding your head.” If the patient indicates that he or she is experiencing anxiety, the therapist can instruct the patient to stop imagining the anxiety-producing situation. Relaxation is deepened and the therapist proceeds to reintroduce the anxiety-producing item. If difficulty still arises in reducing anxiety toward a particular item, the therapist and patient can create a more finely graded hierarchy. Less anxiety-producing situations are identified to use as transition items. The therapist can reintroduce the previous difficult item after obtaining anxiety-reduction with the less anxiety-producing items. To facilitate anxiety-reduction, the desensitization sessions can be tape recorded for the patient to listen to at home. In addition, patients can be encouraged to use the same hypnotic suggestions during their self-hypnosis practice.

In vivo desensitization. Patients are encouraged to practice in vivo exposure in between therapy sessions. They are given in vivo homework based on their progress with imaginal desensitization. The in vivo assignments follow the successful completion of in-session imaginal

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<th>Anxiety-Producing Thoughts</th>
<th>Hypnotic Suggestions</th>
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<td>What if I have an IBS attack while I’m in a car?</td>
<td>I’ve always been able to stay in control until I found a bathroom.</td>
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<tr>
<td>What if I need to use a bathroom while in the center of the row in a movie theater?</td>
<td>People get out of their seats during a movie to go to the bathroom all the time. So, I can too.</td>
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desensitization exposure. They are instructed to gradually have exposure to the feared situations, one step at a time, and to apply their self-hypnosis skills for anxiety-reduction during the in vivo exposures. For a more detailed description of the CBH treatment for another patient with IBS-induced agoraphobia, the reader is referred to Golden (2006).

Therapeutic Results

I have treated a total of 25 patients with IBS-induced agoraphobia. Twenty-four of the patients had the diarrhea-predominant type of IBS. The 25th patient had flatulence as her primary IBS symptom. All of the patients received the CBH treatment described in this paper (hypnosis and self-hypnosis training, cognitive therapy using the two-column method, diaphragmatic breathing, imaginal and in vivo desensitization). They also received education about IBS. Success was defined as completing the steps of one’s hierarchy and by being able to go into those situations consistently. The length of therapy varied, depending on the needs of the patients, and ranged from 6 to 35 sessions. The majority of patients completed therapy within 15 sessions.

Twenty-three of the CBH patients improved to the degree that they were able to go into the places they had previously avoided. Although no quantitative measures were obtained, the successful patients also reported reductions in anxiety and IBS symptoms. Two patients failed to show any improvement. One of those patients, the one with flatulence as her primary complaint, was noncompliant and dropped out after two sessions. The second patient was suffering severe panic attacks and did not respond to any of the therapeutic interventions.

Future Developments in Research and Clinical Practice

In this paper, clinical data is presented on agoraphobic IBS patients receiving CBH that included systematic desensitization. The main focus of treatment was on the phobic reactions that the patients developed as a result of IBS. Although most of the cases had very successful outcomes, controlled experimental studies are needed to establish the efficacy of CBH in treating IBS-induced agoraphobia. There have been a number of studies in the behavior therapy literature, comparing the effectiveness of relaxation alone, usually as the control group, versus using relaxation in conjunction with systematic desensitization in the treatment of fears and phobias. In most studies, systematic desensitization is found to be superior to relaxation alone (Davison, 1968; Golden, 1975; Lang, Lazovik, & Reynolds, 1965; Rachman, 1968). Some form of controlled exposure to the feared situations seems to be needed in overcoming phobias. Using a similar research design, CBH with systematic desensitization could be compared to a hypnotherapy treatment.
that did not include any type of exposure therapy. I predict that treatments that include some form of exposure therapy, such as systematic desensitization, will be the most effective treatment for patients with IBS-induced agoraphobia.

Research could also compare hypnotherapy, CBT, and CBH in the treatment of nonphobic IBS patients. So far, no studies have been done comparing these three treatments.

CONCLUSION

Patients with IBS-induced agoraphobia are similar to other IBS patients in having the same physical symptoms of IBS yet different in having phobias and panic disorder as well. Agoraphobic IBS patients have different treatment needs than nonphobic IBS patients. Therapeutic effectiveness may be enhanced in hypnotherapy programs for IBS to the degree to which the agoraphobic IBS group is identified and is treated for panic symptoms and phobic behavior.

REFERENCES


**Einsatz von kognitiver Hypnotherapie bei der Behandlung von Reizdarmsyndrom-induzierter Agoraphobie**

William L. Golden

Zusammenfassung: Eine Vielzahl von klinischen Berichten und Forschungsergebnissen verweist auf die Effektivität von Hypnotherapie bei der Behandlung des Reizdarmsyndroms. Darüber hinaus existieren...

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L’hypnothérapie cognitivo-comportementale dans le traitement de l’agoraphobie provoquée par un côlon irritable

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Résumé: Bon nombre de rapports cliniques et de recherches portent sur l’efficacité de l’hypnothérapie dans le traitement du syndrome du côlon irritable (SCI). De même, des recherches démontrent l’efficacité de la thérapie cognitivo-comportementale (TCC) dans le traitement du SCI. Il existe toutefois peu de documentation sur l’intégration de la TCC et de l’hypnothérapie dans le traitement du SCI, comme il y a manque de renseignements cliniques sur l’agoraphobie provoquée par le SCI. Le présent article décrit l’étiologie et le traitement de l’agoraphobie provoquée par le SCI. Des méthodes cognitives, comportementales et hypnothérapeutiques sont intégrées afin de proposer une hypnothérapie cognitivo-comportementale efficace (HCC) pour traiter l’agoraphobie provoquée par le SCI. L’article décrit la méthode de l’HCC pour traiter l’agoraphobie provoquée par le SCI, et fait état de rapports cliniques portant sur ce sujet.

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Hipnoterapia cognitivo conductual para el tratamiento de agorafobia inducida por colon irritable

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Resumen: Hay varios informes clínicos e investigación sobre la eficacia de la hipnoterapia para el tratamiento del síndrome de colón irritable (IBS). Asimismo, existe investigación que demuestra la eficacia de la terapia cognitivo conductual (CBT) en el tratamiento del IBS. Sin embargo, hay poco escrito sobre la integración de CBT e hipnoterapia en el tratamiento del IBS y poca información clínica sobre agorafobia inducida por IBS. Este artículo describe la etiología y el tratamiento de dicha aflicción. Integramos
técnicas cognitivas, de comportamiento, e hipnoterapéuticas para proveer un tratamiento eficaz para la agorafobia inducida por IBS. Describimos y proporcionamos datos de investigación sobre este enfoque.

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