**Paradoxical Therapy in Conversion Reaction**

Paradoxical therapy consists of suggesting that the patient intentionally engages in the unwanted behaviour such as performing compulsive ritual or wanting a conversion attack. In this study, the subjects were selected by the emergency unit psychiatrist from patients who were admitted to the emergency unit with pseudoseizure. The diagnoses was based on DSM-IV criteria. Paradoxical intention was applied to half of the 30 patients with conversion disorders; the other half were treated with diazepam in order to examine the efficiency of the paradoxical intention versus diazepam. In both groups the differences of the anxiety scores at the beginning of the study were found to be insignificant \((z=1.08, p=0.28)\). Of the 15 patients who completed paradoxical intention treatment, 14 (93.3\%) responded favorably to paradoxical intention. On the other hand of 15 patients who completed diazepam therapy, 9 (60\%) responded well to therapy and 6 patients carried on their conversion symptoms at the end of 6 weeks. Paradoxical intention-treated patients appeared to have greater improvements in anxiety scores \((z=2.43, p<0.015)\) and conversion symptoms \((t=2.27, p=0.034)\) than the diazepam-treated patients. The results of the present study are encouraging in that paradoxical intention can be effective in the treatment of conversion disorder.

**Key Words**: Psychotherapy; Intention; Conversion Disorder; Diazepam

**INTRODUCTION**

Paradoxical intention (PI) is a technique that was described and developed by Frankl (1), originally in the context of logotherapy. It can be defined as those interventions in which the therapist apparently promotes the worsening of problems rather than their removal (2). Over the last decade, PI has been started to be used as a popular technique by a variety of therapists who have incorporated the technique into their existing clinical practices.

Behavioral researchers have reported a number of case studies supporting the efficacy of PI in the treatment of emotional, behavioral and psychiatric problems. The paradoxical approach has been reported to be successful with symptoms such as obsessive behavior and thinking, insomnia, migraine headaches, anorexia nervosa, phobic neurosis and psychotic states (3-7). However, despite the widespread application of PI to anxiety related problems, we have not found any report on conversion disorder, an anxiety disorder which is known to be more prevalent in lower sociocultural classes and counts up to more than 55\% of the psychiatric diagnoses in our emergency unit. One of the application criteria for paradoxical approaches defined by Rohrbaugh et al. is as follows; "Where opposition is low and symptoms are seen by the patient as outside of control" (8). In conversion disorder, there is no patient opposition to symptoms, and symptoms are outside of the patients control.

There are a variety of paradoxical techniques employed in therapy. Perhaps the most common and best known paradoxical technique is symptom prescription (9). It is applied as a positive or negative intention. In positive intention, the patient is advised or instructed to continue or exaggerate the symptoms and associated behaviors. For an anxious patient, this intention may look like this: "Try to be as nervous as you can" or as used in this study "Try to experience the sensations just before you pass out" and the patient is encouraged to have a conversion attack.

Benzodiazepines are well known to be effective on anxiety (10-13). Wardle and colleagues reported a study on the effects of 5-15 mg/day diazepam on subjects with agoraphobia. In this study, PI was applied to half of the patients with conversion disorders; the other half were treated with diazepam in order to compare the efficiency of paradoxical intention versus anxiolytics in conversion disorder.

**MATERIALS AND METHODS**

The subjects were selected by the emergency unit psychiatrist from patients who were admitted to the emergency unit with pseudoseizure. The diagnoses were based on DSM-IV criteria (14). All patients with an abnormal EEG, organic disease, axis I or II disorder, previous psychiatric treatment were
Table 1. Sociodemographic variables of the paradoxical intention and drug groups

| Variable                  | PI group | Drug group |
|---------------------------|----------|------------|
| Age (range) (yr)          | 23 (16-30) | 27 (18-35) |
| Sex                       | Women 15 | 14         |
|                           | Man -    | 1          |
| Education                 | Illiterate | 5 3       |
|                           | Primary school | 10 11    |
|                           | High school | - 1       |
| Treatment duration (days) | 42       | 48         |

excluded. Finally, thirty patients (29 women and 1 man), diagnosed as conversion disorder were randomly divided into two groups by means of a computer.

PI group consisted of 5 illiterates and 10 primary school graduates. The patients’ mean age was 23 yr (ranging from 16 to 30). Of the patients who were in the diazepam-treated group, 3 were illiterates, 11 were primary school graduates, and 1 from high school. The patients’ mean age was 27 yr (ranging from 18 to 35). The overall mean duration of conversion disorder was 42 days (mean 34 days for the PI group, 48 days for the diazepam-treated group) (Table 1).

All patients were assessed by a psychiatrist who was undisclosed to the subjects’ group throughout the study. The anxiety score was measured for each patient before and after the treatment, using the Hamilton Rating Scale for anxiety (HRSA) (15). The frequency (number of attacks within the past week) of the converstive attacks were noted for each patient, and changes in these scores were converted to percentages. After the six week treatment period, changes in the above scores were analyzed.

All patients were treated by another psychiatrist. Patients treated with diazepam were offered appointments at the days 10-20-30-45 of treatment to review their progress, to reinforce the use of diazepam, and to regulate the dosage of diazepam. This group consisting of outpatients was treated with diazepam, and conversion symptoms.

The patients in the PI group were informed about the nature of the treatment, what was expected of them, and approximately how long the treatment would last. The relationship between anxiety and conversion disorder was discussed with each patient. After obtaining their written consent, they were hospitalized. The patient and family members were interviewed separately. During the history-taking, special attention was given to anxiety provoking situations and experiences specific to the patient. Two sessions were planned for each day. During the session the patient was encouraged to imagine an anxiety provoking situation and/or experience. In most cases the patient was successful to carry out the session without much help from the therapist. In some cases who exhibited resistance, phrases such as “Imagine yourself in that same place with the same person... Think of this as it is happening right now.... try to experience the same emotions you did then..... It's all right if you pass out (or whatever the symptom specific to the patient)” were helpful. In conclusion, we helped the patients to re-experience their specific traumatic events and promoted the patients to try to have conversion attacks. At the end of the three-week period, patients were discharged. We invited the patients to visit us three weeks later, and changes in clinical anxiety scores and conversion were assessed. Family members were interviewed for verification.

Statistical analyses

The baseline anxiety scores of two groups were compared using Mann-Whitney U test. The differences of anxiety scores of each group from baseline to the end were compared using Wilcoxon matched-pairs test. At the end of the study, the differences of anxiety scores of two groups were compared to each other using Mann-Whitney U test. The percentage of recovery from conversion disorder was assessed and the results were analyzed by t-test.

RESULTS

In both groups the differences of the anxiety scores at the beginning of the study were found to be insignificant ($z=1.08, p=0.28$).

The scores of the HRSA at the beginning of the study were decreased significantly at the end of the treatment in both diazepam-treated and ($z=3.24, p=0.0012$), PI groups ($z=3.41, p=0.0007$).

In both groups, the differences in anxiety scores found at the end of the study were compared to one another, and in the PI group, the decrease in anxiety scores were found to be more significant than the diazepam-treated group ($z=2.43, p=0.015$) (Table 2).

 Patients who had no converstive symptoms within the past 2 weeks of the last control were considered as well-responders to the treatment. Of the 15 patients who completed PI treatment, 14 (93.3%) responded favorably to PI at the end of 6-week therapy, only one patient did not respond well to the PI

Table 2. The difference of anxiety scores in both groups

| Variable                  | Drug (n=15) | PI (n=15) | $z^*$ | $p$ |
|---------------------------|-------------|-----------|-------|-----|
| Anxiety score before treatment | 25.60±4.27  | 27.60±5.00| 1.08  | .280|
| Anxiety score after treatment | 18.20±3.47  | 14.47±5.36|       |     |
| Difference                | 7.27±4.56   | 13.13±5.67| 2.43  | .015|
| $z^*$                     | 3.24        | 3.41      |       |     |
| $p$                       | .0012       | .0007     |       |     |

*Mann-Whitney U test; Wilcoxon matched pairs test.*
and at the end of 6 weeks this patient carried on her conversion symptom. On the other hand of 15 patients who completed diazepam therapy, 9 (60%) responded well to therapy and 6 patients carried on their conversion symptoms at the end of 6 weeks. In the PI group, the recovery rate was more significant than in the diazepam-treated patient group ($t=2.27$, $p=0.034$).

### DISCUSSION

Our findings confirm the fact that PI is applicable to the conversion disorder. Although PI is found to be more effective than diazepam which is accepted to be a valuable therapeutic agent in the treatment of conversion disorder, it is not easy to make a complete explanation to the varying rates of improvement between the two treatment groups. This can be related to many factors, e.g., patients receiving diazepam were not hospitalized. They lived in their previous environment. This situation may provide a perpetuity of the symptom-context relationship and secondary gains.

The efficiency of PI may also be related to our paradoxical method. Since the patients were asked to behave symptomatically in an unusual surrounding, the relationship between the context and symptom disappeared. Also, the symptoms lost their surrounding supports and secondary gains.

Patients observed their own symptoms from other patients; this provided the patients with an insight into their diseases. After 3 to 4 days, some of the patients acquired a humorous view to their own conversion. When we asked, "Why can't you be ill anymore?" some of them replied "I find my illness funny". As we encouraged the patients frequently to try to have very severe conversion attacks which are related to the reexperience of a specific traumatic event (at least twice a day; in the morning and in the evening), patients may have acquired desensitization to their anxiety-related problems and satisfaction of their symptoms. This may bring about a change of attitude towards the symptoms which enables the patients to place themselves at a distance from the symptoms.

For example, a 32-yr old patient started having conversive symptoms (passing out without full loss of consciousness, intact sensation to verbal or painful stimuli but unable to respond, and intact memory to this period) when she learned that her husband was about to marry another woman. These symptoms reoccurred whenever she recalled this "traumatic event". She was suggested to frequently recall the fact that her husband was about to marry another woman. During the first five days, she remembered the traumatic event each time she had a conversive attack. On the sixth day, she had no symptoms despite remembering the traumatic event. On asking her why, she answered that passing out was only a game she played to avoid the real challenge, and it would be better to solve the problem by talking to her husband face to face.

According to psychoanalytic theory, conversion disorder is caused by the repression of unconscious psychological conflict which arises anxiety and the conversion of the anxiety into a physical symptom. The psychological conflict is in the patient's unconscious, and the physical symptom is not under voluntary control (14). From this point of view, it seems reasonable that the best approach to this situation would be an insight therapy where the unconscious material is recovered, the patient gains insight to the primary conflict and the necessity to utilize conversion, as a defense mechanism is no longer required. In clinical practice, however, there are certain drawbacks of such an approach. Most of the time, psychoanalytic therapies require long periods of time and are expensive. On the other hand, as mentioned above, conversion disorder is more prevalent in the lower socioeconomic classes in which the patient can not afford the expenses or the time necessary for such a therapy. Another problem arises when the secondary gains become so systematized that the patient presents a "La belle indéfense" which is an indicator of resistance to therapy. Maybe the most important of all, patients who suffer converive symptoms are so convinced that they have organic diseases, e.g., paralysis, epilepsy, this concern alone produces an intolerable anxiety which promotes conversion. Once this vicious circle is established, the patient is most likely to resist psychotherapy and seek help in other fields.

PI is an inexpensive short term psychotherapy. Although it does not remove the primary conflict or challenge the secondary gains, it provides an invaluable insight to the anxiety arising at the second half of the vicious circle. Once the patient eventually perceives the close relationship between the occurrence of the symptoms and anxiety, it is much more easier to establish a self confidence and defeat resistance.

It is sometimes unavoidable to prescribe anxiolytics to patients who exhibit clinical anxiety. This type of treatment is much less expensive than any form of psychotherapy, including PI. However, we have observed that our patients coming from rural areas have important refill problems. Also the risk of dependence or drug abuse are important drawbacks for anxiolytics. Most important of all, patients who are treated with drugs alone are more likely to underestimate the importance of facing the real life problems, since the drug is doing it for them. PI, on the other hand, emphasizes these problems and provides a sense of control and confidence over them. As a matter of fact, paradoxical interventions are much helpful to enable the patient to acquire a sense of detachment towards his/her neurosis by developing a humorous view. Paradoxical intention is the clinical application of Allport’s statement; "The neurotic who learns to laugh at himself may be on the way to self-management, perhaps to cure" (19).

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