Biofeedback-Assisted Relaxation Training for Primary Dysmenorrhea: A Case Study

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Primary dysmenorrhea is a familiar complaint to medical practitioners. Recently, behavior therapy has been shown to be an effective treatment for the symptoms of dysmenorrhea. The present case study offers biofeedback-assisted relaxation treatment as an effective alternative treatment. The Menstrual Symptom Questionnaire was used to classify dysmenorrhea as spasmodic or congestive. This classification provides homogeneous groups of patients. The patient in this study had an 18-year history of primary dysmenorrhea that was resistant to hormonal and analgesic treatment. After two months of baseline observation, she was given eight sessions of skin-temperature biofeedback and autogenic training. She reported significant reduction of pain and discomfort with the use of biofeedback-assisted relaxation. Desensitization using visual imagery, an important component of previous therapies, was not used. Further examination of the efficacy of biofeedback-assisted relaxation training for the treatment of both congestive and spasmodic dysmenorrhea is suggested.

Dysmenorrhea is a familiar complaint to the medical practitioner. Primary dysmenorrhea, or dysmenorrhea when no disease of pelvic organs can be demonstrated, has been effectively treated by behavior therapy (Chesney & Tasto, 1975b; Mullen, 1968; Mullen, 1971; Tasto & Chesney, 1974). The present case study offers biofeedback-assisted relaxation treatment as an alternative and equally effective treatment.

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Chesney and Tasto (1975a) developed the Menstrual Symptom Questionnaire after the model presented by Dalton (1969). Dalton’s work suggested that there are two types of dysmenorrhea: spasmodic and congestive.

**Spasmodic dysmenorrhea**, as described by Dalton (1969), is pain beginning on the first day of menstruation which is felt as spasms of acute pain sometimes so severe as to cause vomiting and fainting. The pain is limited strictly to the parts of the body controlled by the uterine or ovarian nerves, i.e., the back, inner sides of the thighs, and lower abdomen.

**Congestive dysmenorrhea** is a part or variation of the premenstrual syndrome. The woman with congestive dysmenorrhea has advance warning of menstruation for several days during which she may experience increasing heaviness and a dull, aching pain in the lower abdomen as well as other areas of the body including the breasts and ankles. This pain may be accompanied by other premenstrual symptoms such as lethargy, depression and irritability [Chesney & Tasto, 1975b, p. 245].

Since these are two different types of dysmenorrhea, a given treatment may not be effective for both types. Chesney and Tasto (1975b) showed that progressive relaxation and imagery was an effective treatment for spasmodic dysmenorrhea. Their treatment was not effective for congestive dysmenorrhea. This case study explores the use of skin temperature biofeedback and autogenic training in treating spasmodic dysmenorrhea.

Biofeedback has been shown to be an effective tool in the treatment of stress-related disorders (Birk, 1973; Coursey, 1975; Cox, Freundlich, & Meyer, 1975; Reinking & Kohl, 1975). In this process, an aspect of body functioning is measured and the patient is provided with information concerning changes in that parameter. Skin temperature is a useful variable in stress-related disorders. It is a function of blood flow in the periphery, which, in turn, is an inverse function of sympathetic activation. Hand temperature, given constant environmental temperature and control of artifacts, provides an index of arousal (Forsyth, 1974).

Subjects who are able to warm their hands, especially those who are able to warm them to between 95° and 96°F (35° to 35.6°C), report a pleasant state of relaxation. The addition of Autogenic Training Phrases results in an expeditious and effective treatment tool (Green, Green, & Walters, 1974). The phrases utilized in autogenic training help the patient to focus upon sensations associated with profound relaxation (Luthe, 1969). Attending to the phrases sets the stage for reduction in sympathetic activation and for an increase in skin temperature. The patient is informed of the changes in temperature by the feedback apparatus, and learning occurs.

**SUBJECT**

The patient was a 29-year-old single, white female with no medical complaints other than dysmenorrhea. This disorder had been present since