On the basis of this type of analysis we have formulated three levels of therapeutic attack. The first level is aimed at attempting to help the patient avoid excessive eating, utilizing the basic principles of the Stuart self-control procedure (Stuart, 1967). We have obtained a limited therapeutic effect with this method, in terms of a reduction in frequency of self-induced vomiting, but only in patients with a relatively low frequency to start with, i.e. once per day.

In patients with a high frequency of self-induced vomiting (i.e. 6 to 10 times per day), we have been forced to try out two other, more extreme methods. Both of these were suggested by comments made by patients. The first involves 'direct confrontation', utilizing videotape feedback of an eating and vomiting session. The second involves 'apomorphine aversion' and is based on the observation that regular, self-induced vomiters no longer feel sick and nauseated when they vomit. The aim is to re-associate the act with the normal experiences of vomiting. Both of these produce an immediate improvement, which unfortunately is lost with time.

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How Anorexics See Themselves

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The tendency of anorexic patients to overestimate their own body size was one element of Bruch's (1962) concept of body image disorder. The first experimental validation of this tendency was reported by Slade and Russell (1973), who also demonstrated that overestimation was directly related to a poor prognosis and that patients tended to become more accurate with therapeutically induced weight gain.

More recent findings indicate that this disturbance is not specific to anorexia nervosa (e.g. Button *et al*, 1977 and Garner *et al*, 1976). The most recent data obtained in our Department, using larger samples, point to a lack of significant difference between anorexic and normal females except in the area of waist/stomach where there is a marked tendency of anorexics to overestimate to a greater extent than normal females of comparable age. An important difference, however, was that the anorexics were much more variable, reflecting the tendency of a significant minority to markedly underestimate their size.

This more general tendency to overestimate body size amongst young females is seen as being a reflection of the almost universal concern amongst women with the need to be slim. Further data revealed that overestimation amongst anorexics was directly related to subjective feelings of fullness and fatness as well as negative attitudes to the body, supporting an argument that abnormal body perception is not an isolated phenomenon.

Resulting from these data a two-factor theory of perceptual disturbance in anorexia nervosa is proposed. Firstly, feeling of fullness in the stomach, possibly resulting from a decreased tolerance for food associated with semi-starvation, coupled with high sensitivity to such feelings, leads to an abnormal perception of that part, which is capable of generalizing to other parts. Secondly, motivated distorted perception may be occurring, in that patients may be making a desperate communication aimed at warding off the feared weight increase.

Other data presented demonstrated that patients vary considerably in their perceptual response to treatment. In similar vein is the finding that vomiters are more inclined to overestimate than non-vomiters.

Finally, some therapeutic implications were outlined. Firstly there is usually a need for refeeding aimed at helping patients to re-adapt to normal intake levels. For most patients, however, this will not be sufficient, and it is suggested that psychotherapy, aimed at resolving the conflicts the patient experiences surrounding her perception of what it means to be normal weight will be an essential longer-term aim.

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