Management of Labor in Which Epidural Anesthesia Is Used

EA is a significant intervention about which patients should be well informed. Ideally, education should occur prior to the onset of labor so that the patient can be knowledgeable about her options during labor and delivery.

Because of the strong association with need of oxytocin augmentation after EA,[2,4] consideration should be given to placing an intrauterine pressure catheter early in the course of labor to measure contraction strength if EA is to be used.

If avoidance of instrumental delivery is desired, allowing the degree of anesthesia to decrease[5,11] or using a lighter level of anesthesia as described by Potter and MacDonald[9] should be considered. Another recommendation to avoid rotational forceps is to allow the woman to remain on her side for up to one hour after complete cervical dilation before beginning pushing. It may be more considerate of the mother and fetus to question the use of EA for pain-free labor and delivery than to accept the complications associated with EA. Although there are methodologic problems with many studies of epidural anesthesia, it does appear that it may significantly alter the course and management of labor and delivery.

References

1. Studd JW, Crawford JS, Duignan NM, et al: The effect of lumbar epidural analgesia on the rate of cervical dilation and the outcome of labour of spontaneous onset. Br J Obstet Gynaecol 87:1015, 1980
2. Schussman LC, Wolley FR, Larsen LC, et al: Epidural anesthesia in low-risk obstetrical patients. J Fam Pract 14: 851, 1982
3. Wieczorek E, Sobiech KA: Oxytocinase activity in the course of continuous lumbar epidural analgesia. Acta Obstet Gynecol Scand 59:421, 1980
4. Raabe N, Balfrage P: Epidural analgesia in labour. Acta Obstet Gynecol Scand 55:305, 1976
5. Hoult IJ, MacLennan AH, Carrie LES: Lumbar epidural analgesia in labour: Relation to fetal malposition and instrumental delivery. Br Med J 1:14, 1977
6. Hibbard B, Weaver JB, Pearson JF, et al: Lumbar epidural analgesia in labor. Br Med J 1:286, 1977
7. McQueen J, Mylrea L: Lumbar epidural analgesia in labour. Br Med J 1:640, 1977
8. Crawford JS: Evaluation of epidural analgesia. S Afr Med J 59:433, 1981
9. Potter N, MacDonald RD: Obstetric consequences of epidural analgesia in multiparous patients. Lancet 1:1031, 1971
10. Morgan BM, Rehor S, Lewis PJ: Epidural analgesia for uneventful labour. Anaesthesia 37:57, 1980
11. Sweeney DB: Trial of bupivacaine in extradural anaesthesia in obstetrics. S Aust Clin 5:151, 1971

Binge Eating, Vomiting, and Weight Fear in a Female High School Population

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Bulimia nervosa is an eating disorder characterized by alternating episodes of binge eating and rigid dieting and is frequently associated with self-induced vomiting following binges.[1,2] Another determining characteristic is a morbid fear of fat. These behaviors are often found in patients with anorexia nervosa, although the latter disorder involves less frequent binging behavior. Furthermore, anorexia nervosa involves self-induced loss of weight with severe emaciation and persistent amenorrhea.[2]

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Bulimia nervosa has been called a dangerous disorder because it may lead to potassium depletion and other physical complications, such as swollen salivary glands and deterioration of tooth enamel. Psychological complications may include anxiety, depression, and interference with daily functioning caused by obsessional thoughts of food and vomiting.[2]

Data now suggest that bulimia nervosa, considered rare until recently, may be widespread among college undergraduates, particularly women.[1,3] Although several sources suggest that the onset of binge eating occurs in adolescence,[4,5] there has been no known report on the prevalence of bulimia nervosa symptoms in a high school population. Therefore, investigating younger adolescent populations would be a useful step in providing a greater understanding of the development of the disorder.

Methods

The Eating Attitudes Test (EAT) is a 40-item questionnaire that has been shown to identify accurately anorexic patients.[6] Although validated on an anorexic population, the measure provides information on the bulimia symptoms of binge eating, vomiting after eating, and fears of weight gain. Moreover, the frequency of amenorrhea is reflected on the EAT. This item may serve to identify anorexics as opposed to bulimics, since the latter population would be more likely to continue menses. The present study involved the administration of the EAT to a female adolescent population in an attempt to determine the prevalence of symptoms often associated with bulimia nervosa.

A total of 151 girls from the only two public high schools in a small northwest Georgia community (population, 40,000) were assessed. As the assessment involved only girls, home economics classes, in which few male students were enrolled, were evaluated. Furthermore, the seven home economics classes assessed represented all such classes composed of tenth graders. As a result,

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Table 1. Responses to Specific Items Related to Eating Binges, Vomiting After Eating, and Fear of Weight Gain

Item	Frequency			Percentage of Sample
	Always	Very often	Often	
Have gone on uncontrollable eating binges	4	2	19	16.6
Vomit after I have eaten	4	3	3	6.6
Terrified of being overweight	37	10	18	43.1
Preoccupied with a desire to be thinner	30	14	15	39.1
Preoccupied with the thought of having fat on my body	26	18	9	35.1

these data were considered a fairly comprehensive and representative sample of the town's tenth-grade girls.

Permission was obtained from school officials to administer the EAT to a group of female subjects. The voluntary nature of completing the EAT was emphasized and the reasons for administering the questionnaire were explained to the subjects before completion of the questionnaire.

Results

Given the nature of this study, only descriptive statistics were used in analysis. Scores of 30 or above on the EAT have been demonstrated to effectively identify anorexic populations. A total of 18 (11.9 percent) of the subjects scored 30 or above. Importantly, only four of these subjects reported the absence of regular menstrual periods, an essential diagnostic criterion for anorexia nervosa. Therefore, only these four could be considered true anorexia nervosa subjects.

To further evaluate the data, specific items related to bulimia nervosa were isolated (Table 1). A total of 25 (16.6 percent) subjects reported frequent eating binges, while 10 (6.6 percent) reported frequent vomiting episodes after eating. The results for items related to fear of weight gain indicated that 65 (43.1 percent) subjects were terrified of being overweight, 59 (39.1 percent) were preoccupied with a desire to be thinner, and 53 (35.1 percent) were preoccupied with the thought of having fat on their bodies. The results suggest that the symptoms of bulimia nervosa are found in a significant percentage of female high school students. It would appear that a conservative estimate of the frequency of bulimia nervosa in this population would be 6 to 7 percent on the basis of self-induced vomiting, and it may go as high as 16 to 17 percent on the basis of a binge-eating criterion. Using the criterion of irregular menstrual periods, less than 3 percent of these subjects might also be considered anorexic.

Comment

These results are interesting, since bulimic behaviors were considered rare only a few years ago. There are several possible reasons for such a change. The data may simply reflect an increase in public awareness of the problem. Binge eating and self-induced vomiting are usually performed in a secretive manner. Only recently have the specific patterns of behavior associated with bulimia nervosa come to public attention and, thereby, possibly become less clandestine. On the other hand, the findings of increased incidence may be real. Such increases might be due to changes in societal

expectations and the emphasis on thinness in women.[7] Regardless of the reasons, it is quite apparent that these symptoms are much more prevalent than originally suspected.

It would behoove medical professionals to screen carefully for bulimia nervosa in their young female patients. Once these individuals are identified, treatment should be attempted. Limited evidence suggests that bulimia nervosa patients may respond favorably to behavioral psychological approaches.[8] Although the successfully treated cases justify guarded optimism, further controlled research is needed prior to the complete advocacy of these or other treatment approaches.

In conclusion, bulimia nervosa appears to be a prevalent disorder, and further research is needed at the levels of assessment, diagnosis, and treatment. It is hoped that physicians will appreciate the implications of the present study, and that it will aid them in identifying and assisting patients with the symptoms of bulimia nervosa.

References

1. Boskind-Lodah M, Sirlin J: The gorging purging syndrome. Psychol Today 11:50, 1977
2. Russell G: Bulimia nervosa: An ominous variant of anorexia nervosa. Psychol Med 9:429, 1979
3. Hawkins RC, Clement PF: Development and construct validation of a self-report measure of binge eating tendencies. Addict Behav 5:219, 1980
4. Diagnostic and Statistical Manual of Mental Disorders, ed 3. Washington, DC, American Psychiatric Association, 1978
5. Loro AD, Orleans CS: Binge eating in obesity: Preliminary findings and guidelines for behavioral analysis and treatment. Addict Behav 6:155, 1981
6. Garner DM, Garfinkel PE: The eating attitudes test: An index of the symptoms of anorexia nervosa. Psychol Med 9:273, 1979
7. Garner DM, Garfinkel PE, Schwartz D, Thompson M: Cultural expectations of thinness in women. Psychol Rep 47:483, 1980
8. Rosen JC, Leitenberg H: Bulimia nervosa: Treatment with exposure and response prevention. Behav Ther 13:15, 1982

The Clinical Dietitian in Family Practice Residency Programs

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There is increasing emphasis on nutrition education throughout medical education. The American Academy of Family Physicians recently added education in nutrition to its revised special requirements for family practice residency training, which were effective July 1, 1983.[1] How programs will meet this requirement has not been examined. Physicians with a strong background in nutrition may be suitable to teach nutrition, but their scarcity may have been a compelling force behind this new requirement. The clinical dietitian may appropriately assume this role; however, as yet the scope of the dietitian's involvement has not been established.

The purpose of this study was to define the current role of dietitians in family practice residencies. Specifically, their numbers, educational degrees, and functions were investigated to identify their participation in resident nutrition education.

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Methods

In November 1982 a written questionnaire was mailed to the 385 program directors listed in *The*