

Eating disorders in pregnancy

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ABSTRACT

The most frequent eating disorders are anorexia nervosa, binge eating and bulimia nervosa. They are frequently aggravated during pregnancy or postpartum and because they impair the general health and psychosocial functioning of the patients, it is fundamental to be carefully managing these pathologies in a multidisciplinary team. The common association with menstrual irregularities, even with secondary amenorrhea, lead to unplanned pregnancy following the patients' belief that they are infertile, and this represents a risk factor for both mother and fetus. Carefully attention should be paid in the patients' assessment due to the concealment behaviors adopted in order to hide the maladaptive patterns or the eventual use of certain potential drugs that are thought to prevent weight gain or an excessive appetite and, moreover, in the postpartum period patient should be carefully investigated for an eventual anxiety or depression syndrome that may arise as a result of the postpartum body shape or weight gain from the pregnancy period.

Keywords: eating disorders, anorexia nervosa, binge eating, bulimia nervosa, weight gain

INTRODUCTION

The main eating disorders (ED) associated with pregnancy are anorexia nervosa (AN), binge eating (BE) and bulimia nervosa (BN); these disorders represent the foundation to persistent eating patterns disturbances that lead to the general health impairment and psychosocial malfunctioning (1). It is important to state that pregnancy can be the main deterrent of an ED exacerbation through the body shape changes that will

lead to an increased level of anxiety of further weight gain. They are common in young patients, from adolescence to young adults and become symptomatic during pregnancy when the medical management assesses carefully the weight and the eating habits. During pregnancy there are cases when the eating pathology is recovered just like quitting smoking, but there are also cases of vulnerable patients, when the symptoms of the ED are installing, persisting or even aggravating (2).

MANAGEMENT OF CASES WITH EATING DISORDERS

A comprehensive initial evaluation approach is mandatory in the case management and should include the medical and especially the psychiatric history, with mental status and physical examination. Laboratory tests should be focused, because they usually are of limited utility for diagnosing but useful in excluding other medical disorders that could cause weight loss. It is a real need to highlight the high tendency of concealment and the compensatory developed behaviors of patients such as purging, excessive eating or fasting, excess use of diuretics or laxatives due to feelings such as shame, denial or even guilt. Table 1 summarizes the warning signs for the presence of an ED in pregnancy (2-4).

TABLE 1. Warning signs for eating disorders (ED) in pregnancy

History of an ED
Psychological problems like the presence of a mood or anxiety disorder
Abnormally low body mass index and concerned about weight but not overweight
Lack of weight gain over 2 consecutive prenatal visits from the second trimester
Menstrual disturbance or amenorrhea in personal history
Hyperemesis gravidarum
Unexplained electrolyte disturbances from the use of laxatives
Gastrointestinal symptoms along with physical signs of starvation (e.g. dental problems suggestive for poor dental enamel from frequent emesis)

From the nutritional status point of view, ED with a below normal body mass index (BMI), usually, AN should be noted, while BE and BN are associated with normal or above normal BMI (5). When talking about diagnosing the ED, there should be taken into consideration the American Psychiatric Association's Diagnostic and Statistical Manual, Fifth Edition (DSM-5) criteria (1). An important aspect about the ED in pregnancy is that the evidence from literature varies in quality, due to imprecise diagnoses, not a well-documented activity of the disorder during the pregnancy and the lack of adjustment for eventual factors such as pre-pregnancy BMI, maternal age (2).

ANOREXIA NERVOSA (AN)

The AN prevalence is difficultly estimated for pregnant women because they gain weight, but hardly can be determined the previous low BMI (6). If we analyze the community studies of pregnant woman from the northern Europe, we observe a 0.1% to 0.3% estimated prevalence, while in United Kingdom the prevalence is

up to 0.7%; but while the concealment phenomenon is present, the prevalence is probably underestimated (2,7). Clinical manifestations include amenorrhea in 70% to 90% of the patients, but with fertility rate similar with the general population; in many cases the patients received medical treatment for infertility previously (8,9). Another frequent discovery is the fact that unplanned pregnancy and induced abortion are common in patients with AN (9).

Regarding the nutritional consumption, despite the fact that the changes in body shape and the prospect of weight gain are distressing, there are no consistent differences in nutrient intake and the pregnant women with AN are more predisposed to choose a vegetarian diet (10,11). Smoking is frequent in AN patient, with an increased prevalence compared to females without ED (12). Moreover, depression is frequently found in pregnant women with ED than in general population and the symptomatic patients are more prone to develop symptoms of postpartum depression (13). Gestational weight gain in patients pregnant with AN varies, but is greater than the normal females at delivery (14).

Adverse pregnancy outcomes which are more frequent in pregnant women with AN are represented by antepartum hemorrhage with an approximately 60%-70% greater risk than in the general population, microcephaly and lower birth weight but with a small clinical difference (approximately 190 grams) (15,16). There are several complications with conflicting results across studies, such as preterm birth, stillbirth, neonatal death and small for gestational age (4,12,15,17). AN does not raise the risk for preeclampsia, miscarriage, large for gestational age or cesarean delivery (14,15,17). Concerning the postpartum outcome, AN is associated with breastfeeding cessation in the first six months and with infants with difficult temperament or fussiness, demanding excessive attention or crying a lot, loudly and angrily (18,19).

The course of the illness during the pregnancy is variable, from diminishing, but with a residual risk of relapse; persisting or crossing over to a different ED such as BN (20). The mortality risk is higher than in population without AN, but is decreased after the first birth (21).

BULIMIA NERVOSA (BN)

The estimated prevalence of BN from the northern countries studies is of 0.2% and can rise up to 0.5-1% (2,6). The unplanned pregnancies and the fertility rates are similar to the ones from the general population, despite the present menstrual irregularities, which can explain the higher rates of induced abortions and fertility treatment (2,9,22). BN is a disorder with no differences in the nutrient intake amount, but with a distress about the body shape and weight gain; patients suffer-

ing from BN are also predisposed to choose vegetarian diets (10,11).

Smoking is a more prevalent in mothers with BN and depression is also a frequent finding in such patients, both during and after the pregnancy, leading to a severe gestational weight gain (13,23,24).

About the delivery outcome, birth weight is similar to the ones with mothers without BN; BN is associated with an increased rate for miscarriages, neonatal microcephaly (2,12,15), but is not associated with higher risk rates for small or large for gestational age, preterm delivery, preeclampsia or cesarean delivery (14,15,23). When talking about nausea and vomiting, but not self-induced vomiting, they appear more often in the first gestational month at women with BN complicated with purging; also, these patients present more frequently hyperemesis gravidarum (2,15).

Regarding the postpartum outcomes, there cannot be formulated a conclusion whether the infants have a lower or a higher growth rate, while breastfeeding seems to be similar to the general population; the infants present difficult temperament, fussiness, demanding more attention and cry a lot, loudly and angrily (18,19,25).

The course of the disease may be with total or partial remittance during pregnancy or with relapse for the remitted BN previously to the pregnancy, while after parturition BN may persist or reappear (6,20,26).

BINGE EATING (BE)

The estimated prevalence for BE, from the northern countries' studies, is of 5%, with a majority of new onset cases during pregnancy (6). The patients have a distress from the prospect of change in body shape and from the weight gain and both pregnant and postpartum patients are frequently depressed (10,13). Gestational weight gain is excessive with a daily highly intake of calories and a greater total weight gain at delivery (24).

Pregnant patients with binge eating present a higher risk for the pregnancy is miscarriage, smoking initiation, but they are not at risk for small for gestational age, preeclampsia, preterm delivery or cesarean section (2,22,23). During pregnancy, there is an initial lower growth rate that maintains during the whole period (25). Moreover, the infants are prone to have a difficult temperament, fussiness with a high need for attention and they are moody and temperamental (19). Usually, BE persists during pregnancy or, if installed during pregnancy, will persist or reoccur postpartum (6,20).

EATING DISORDERS DURING PREGNANCY

The management of a case with ED during pregnancy should be carefully attended before, during and af-

ter the pregnancy. Prior to pregnancy, patients should be counselled about contraceptive methods, because the symptoms such as menstrual irregularities, even secondary amenorrhea, can lead to unplanned pregnancy, while believing they are infertile, and about the risks for the patient (e.g. weight gain or the increment of the abdominal dimensions or other comorbid psychopathology such as depression or anxiety) and for the infant, in case of pregnancy. The most important fact is to postpone the pregnancy until the ED stabilization, with resolution of the ED's complications or other medical conditions (27).

The pregnancy follow-up should be undergone by a team including a psychiatrist, a dietician and an obstetrician or, in severe cases, to be referred to an ED program, even hospitalization (28,30).

It is important to be close monitored on the dietary pattern, on the weight gain and fetal growth curves, on the use of drugs with harmful potential for the pregnancy such as antidepressants, medication for mood disorders, diuretics, laxatives, benzodiazepines or appetite suppressants, especially in the cases when the patients keep their condition a secret (4,5,29).

As for the postpartum period, the possibility of relapse should be carefully attended along with the installment of postpartum depression (4,5).

CONCLUSIONS

Eating disorders such as anorexia nervosa, bulimia nervosa and binge eating are associated with persistent disturbances of the eating patterns with consecutively deterioration of the medical condition and of the psychosocial functioning.

Initial evaluation of a patient with ED should be carefully conducted in order to identify an eventual concealment of the abnormal eating pattern or compensatory behaviors, of alarm features for ED such as history of an ED, psychological problems like the presence of a mood or anxiety disorder, abnormally low body mass index and concerned about weight but not overweight, lack of weight gain over 2 consecutive prenatal visits from the second trimester, menstrual disturbance or amenorrhea, hyperemesis gravidarum, unexplained electrolyte disturbances from the use of laxatives, gastrointestinal symptoms along with physical signs of starvation (e.g. dental problems suggestive for poor dental enamel from frequent emesis).

Women with history of anorexia nervosa have normal fertility rates and have commonly unplanned pregnancies, but are not a higher risk of miscarriage, preterm delivery, preeclampsia, cesarean section and AN, usually, remits during the pregnancy.

Females with history of bulimia nervosa present normal fertility rates, the gestational weight gain is se-

verely higher than normal, with a high risk of miscarriage; infants are small for gestational age; the risk for preeclampsia, cesarean delivery or preterm delivery is absent. BN usually remits during the pregnancy and re-occurs postpartum.

Patients with history of binge eating present a severely high gestational weight gain, the risk for miscarriage is present, while the risks for preterm delivery,

preeclampsia or cesarean delivery are absent. Infants are small for gestational age and the pathology persists during and after the pregnancy.

A careful management of the cases suffering from ED should be attempted before, during and after the pregnancy with an emphasize on the weight gain of the mother and fetus, along with the eating patterns and other possibly harmful use of drugs.

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