

Weight matters! Insufficient early regained weight increase risk of unfavorable outcome in hyperemesis pregnancies.

7. Early pregnancy complications

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Objective

Maternal weight is a strong predictor of fetal birth-weight and early weight-gain (<20 weeks) may contribute independently irrespective of total weight gain. Women with hyperemesis gravidarum (HG) often lose substantial weight during early pregnancy. We aimed to investigate whether not regaining pre-pregnant weight at 15-18 weeks contributed to insufficient BMI-specific pregnancy weight-gain and risk of small-for-gestational age (SGA).

Study design

A retrospective 15-year hospital cohort (2002-2016) with review of outpatient maternity records and hospital files for hyperemesis patients retrieving pre-pregnant weight, 3-weeks interval pregnancy weight-gain, delivery- weights and pregnancy outcomes. BMI-categories and corresponding minimum aimed for total pregnancy weight-gain were categorized according to Institute of Medicine (IOM) 2009 guidelines. Not regained prepregnant weight at 15 or 18 weeks was defined as insufficient. SGA was defined as singleton birth-weight <10 percentile according to gender and gestational-length weight-charts.

Results

Of 859 women hospitalized due to HG, follow up was available for 746 singleton and 32 twin pregnancies. In all 33 women were classified as underweight, 459 normal weight, 197 overweight and 88 obese of which 335/738 (45.4%) achieved less than minimum recommended weight gain and 76/746 (10.2%) delivered a SGA-baby.

Low initial weight-loss, Caucasian ethnicity, regained weight at 15-18 weeks and total pregnancy weight-gain each correlated univariate significant with achieving minimum total pregnancy weight-gain, while only total weight-gain remained significant in multivariate analysis (OR 2.24, 95%CI 1.84-2.73).

Non-Caucasian ethnicity, nulliparity, low prepregnant-BMI, low total pregnancy weight-gain and not regaining weight at 15-18 weeks each correlated univariate significant with risk of SGA (all $p \leq 0.015$). Not regaining 15-18 weeks-weight contributed independent multivariate risk of SGA (OR 2.80, 95% CI 1.17-6.68, $p=0.021$).

Conclusions

Low weight-gain during early pregnancy independently correlates with unfavorable outcomes of hyperemesis gravidarum pregnancies. Early restoration of prepregnant weight should be considered equally important as total weight gain in hyperemesis treatment.