

Is the pancreas responsible for Hyperemesis Gravidarum?

Sir,

This pilot study was inspired by the recent suggestions in the literature, animal-based research that hyperemesis gravidarum might be the result of changes in the pancreas which are stimulated by high levels of human chorionic gonadotropin (hCG). This appears to be an effect of the presence of high affinity specific hCG binding activity in this organ.¹ Fifteen patients with hyperemesis gravidarum attending Sultan Qaboos University Hospital were included in the study group. All of them were first trimester, singleton pregnancies. The criteria to diagnose hyperemesis gravidarum was as follows: Ketonuria of 2 pluses or more, vomiting at least 4 times a day and no other medical cause that might be responsible for emesis. The control group of the same quantity and characteristics, but with no excessive vomiting was chosen randomly. Each patient underwent ultrasonographic examination of pancreas as well as assessment of serum amylase, B-hCG and white cell count (WBC). Our study showed that the WBC increased (above $4.8 \times 10^3/\text{mm}^3$) in 11 patients from the hyperemesis group and 13 from the control group. Level of serum amylase increased

(above 125 U/L) in 3 women from the study group and 2 from the control group. Ultrasound examinations of the pancreas revealed no gross pathology in any of the 30 patients. In accordance with other authors we have seen a higher b-hCG level in hyperemesis group than in the control group (125×10^3 IU/L versus 67×10^3 IU/L - mean values respectively).² To conclude, we cannot confirm the theory that hyperemesis gravidarum is caused by pathology of the pancreas. However, our limited short study ought to be verified by the bigger and more detailed research.

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