

CI 1.4-1.7; $p < 0.001$, Table). Specifically, the incidence of urinary tract infection, gastroenteritis, acute otitis, and upper respiratory tract infection, was significantly higher among the exposed group. The survival curve indicated that children exposed in-utero to asthma had a higher cumulative incidence of long-term infectious-related hospitalizations (Figure, Log rank < 0.001). In the Cox proportional hazards model, adjusted for maternal age, gestational age, maternal diabetes and hypertension, maternal asthma remained independently associated with an increased risk for infectious-related hospitalizations in the offspring (HR 1.4, 95% CI 1.32-1.59, $p < 0.001$).

CONCLUSION: Maternal asthma during pregnancy appears to be a significant risk factor for long-term pediatric infectious morbidity in the offspring.

Table: Incidence of infectious morbidity in children born to mothers with and without asthma.

| Infectious-related hospitalization | Maternal asthma (n=3264) | No maternal asthma (n=238923) | Odds Ratio | 95%CI | p value |
|---|--------------------------|-------------------------------|------------|----------------|------------------|
| Urinary tract infection | 0.9% | 0.6% | 1.5 | 1.0-2.2 | 0.040 |
| Gastroenteritis | 1.6% | 1.2% | 1.4 | 1.0-1.8 | 0.031 |
| Meningitis | 0.4% | 0.3% | 1.2 | 0.7-2.1 | 0.524 |
| Otitis | 3.4% | 2.0% | 1.7 | 1.4-2.1 | <0.001 |
| Upper respiratory infection | 4.7% | 2.9% | 1.6 | 1.4-1.9 | <0.001 |
| Pneumonia | 0.2% | 0.1% | 1.7 | 0.7-3.8 | 0.206 |
| Bronchiolitis | 2.2% | 1.9% | 1.2 | 0.9-1.5 | 0.159 |
| Gram negative infection | 0.6% | 0.5% | 1.2 | 0.8-2.0 | 0.351 |
| Streptococcus or Staphylococcus infection | 0.3% | 0.3% | 1.0 | 0.5-1.8 | 0.958 |
| Viral infection | 0.6% | 0.5% | 1.4 | 0.9-2.2 | 0.127 |
| Total morbidity | 14.2% (464) | 9.9% (23745) | 1.5 | 1.4-1.7 | <0.001 |

CI, confidence interval.

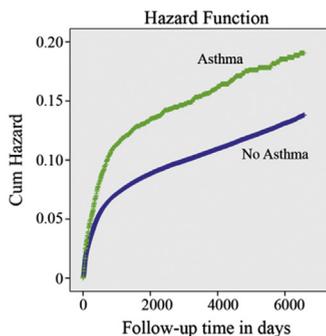


Figure: Kaplan Meier survival curve for infectious-related hospitalizations in children born to mothers with or without asthma during pregnancy. (Log rank < 0.001).

825 Can we use home sleep testing with autoscoring to triage for sleep apnea in obese pregnant women?

Francesca Facco¹, Sanjay Patel², Jenny Wolsk³, Stephen Wisniewski³

¹Magee-Womens Research Institute, University of Pittsburgh School of Medicine, Dept of OB/GYN/RS, Division of MFM, Pittsburgh, PA,

²University of Pittsburgh School of Medicine, Dept of Medicine, Pittsburgh, PA,

³University of Pittsburgh Graduate School of Public Health, Pittsburgh, PA

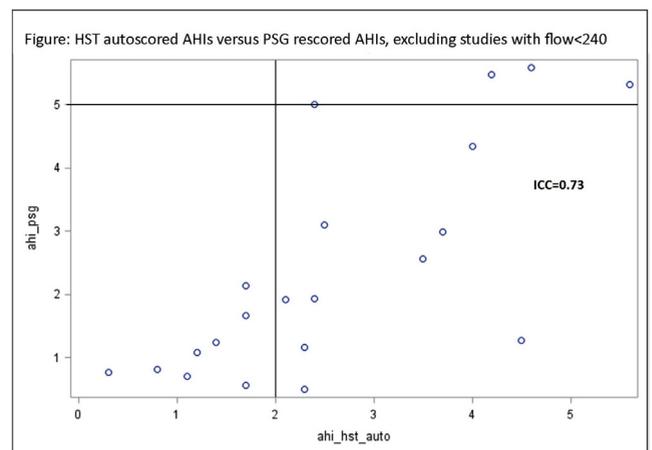
OBJECTIVE: Obstructive sleep apnea (OSA) in pregnancy has been associated with adverse pregnancy outcomes. However, there are still

limited data on how best to test for and treat OSA in pregnancy. Home sleep testing (HST) devices with autoscoring capabilities may lessen the burden of testing for OSA in pregnancy, however data regarding their reliability in pregnancy are limited. Our goal was to evaluate the reliability of HST with autoscoring at low apnea hypopnea index (AHI) values.

STUDY DESIGN: This was an ancillary study of an ongoing prospective study of OSA in obese pregnant women. For the primary study women are recruited in early pregnancy and undergo an in-lab polysomnogram (PSG) before 21 weeks' gestation to evaluate for OSA. OSA is defined as an AHI of ≥ 5 , with values of 4.6 or greater rounded up to 5. Those who test negative for OSA at the first PSG, return for a repeat evaluation between 28-32 weeks' gestation. It is anticipated that some of these women will develop mild OSA during pregnancy, but most are expected to have a second negative study. A subgroup of these women were asked to wear an Apnea-Link HST device for 1 night, within 2 weeks of the repeat PSG. We used the Apnea-Link autoscoring algorithm to obtain a AHI for the HST. HSTs were considered valid if they had a ≥ 4 hours of nasal flow signal. We compared the HST-autoscore to PSG using the intraclass correlation coefficient (ICC), and assessed categorical agreement (AHI ≥ 5 (positive) or < 5 (negative)).

RESULTS: 34 women were recruited and we obtained 21 valid HST (5 women never wore the device, 8 had an inadequate signal). 4/21 women were diagnosed with OSA by in-lab PSG. The agreement between HST-autoscore AHI and PSG AHI was good (ICC 0.73, Figure). Categorical agreement was excellent (90.5%). All negative PSG studies were negative on HST-autoscore. The 2 positive HST-autoscore studies were also positive on PSG. Of the 4 positive PSG, 2 were negative by HST-autoscore (5.01 PSG vs. 2.4 auto and 5.47 PSG vs. 4.2 auto).

CONCLUSION: A low HST-autoscore of < 2 may be sufficient to rule out OSA in obese pregnant women. Our data demonstrates that HST with autoscoring may be a useful tool to help quickly triage obese women for further OSA evaluation.



826 Computed tomographic pulmonary angiography and its use in pregnancy and the puerperium- a five-year retrospective review

Fiona E. O'Toole, John J. Morrison

Galway University Hospital, Galway, Ireland

OBJECTIVE: The purpose of this study was to examine the use of CTPA in obstetric patients at our tertiary level unit and to calculate the overall proportion of positive results.