

March 25-26, 2019
Rome, Italy

Midori Ura, Int J Anesth Pain Med 2019, Volume 5
DOI: 10.21767/2471-982X-C1-005

Relationship between sleep-disordered breathing and sleeping position at the 37th week of pregnancy: An observational cross-sectional study

Midori Ura

Junshin Gakuen University, Japan

Purpose: Sleeping in the lateral position during pregnancy can potentially reduce the severity of sleep disordered breathing (SDB). However, this hypothesis has not been formally investigated in pregnant women. Unlike previous studies that have relied largely on self-reported measures of sleeping position, we investigated the relationship between SDB and sleeping position during late pregnancy using objective measurements.

Methods: Thirty pregnant women at the 37th gestational week and 30 non-pregnant women (n-Pr) participated in the present study. The pregnant women were divided into two groups: those with body mass index (BMI) ≥ 30 kg/m² (with obesity, p-Ob), and those with BMI < 30 kg/m² (without obesity, p-nOb). Data were collected using a portable screening device to detect SDB indicated by the respiratory disturbance index (RDI) as well as sleeping position.

Results: The occurrence of the lateral sleeping position was higher in pregnant women than in n-Pr ($P < .05$). The total RDI significantly differed among the three groups [$P < .01$; p-Ob, 10.7 (3.1); p-nOb, 7.0 (3.0); n-Pr, 4.3 (2.9)]. The p-Ob group showed significantly lower RDI in the lateral position than in the supine position ($P = .04$). Moreover, there was a significant difference in RDI between p-Ob

and p-nOb for the supine position ($P = .001$), but there was no between group difference for the lateral position.

Conclusions: Sleeping in the lateral position is likely to mitigate existing SDB in pregnant women with obesity in late pregnancy and may be an effective precaution against undiagnosed SDB and associated complications.

Biography

Midori Ura started working as a Medical Technologist in Tokyo after graduating from University. She completed her Master's Degree in Public Health in the United Kingdom, following which she participated in organizations for international cooperation, such as JICA (Japan International Cooperation Agency) and UNFPA (United Nations Population Fund), and did a research project on the developing countries for the purpose of global health. In order to be a qualified technologist, she started working as a Medical Technologist at the Shinshu University Hospital, Japan again and has obtained the Registered Medical Sonographer certification in the field of vascular and OBGYN including fetus screening. In the meantime, she also completed her PhD in Health Science at Shinshu University in Japan. She has been a Lecturer of Clinical Physiology and Public Health at Junshin Gakuen University.

ura.m@junshin-u.ac.jp