

INTISARI

Latar belakang : Kadar seng rendah akan meningkatkan risiko komplikasi kehamilan dan persalinan. Penelitian terdahulu mengemukakan kadar seng yang rendah berhubungan dengan terjadinya partus yang lama, persalinan bantuan, laserasi serviks dan vagina, prematuritas, berat badan lahir rendah. Penelitian hubungan kadar seng terhadap ketuban pecah dini masih belum banyak diteliti. Ketuban pecah dini masih merupakan masalah obstetri oleh karena mortalitas dan morbiditas yang tinggi pada maternal dan janin dan penanganannya yang masih kontroversial.

Tujuan : Penelitian ini untuk mengetahui apakah ada hubungan kadar seng terhadap terjadinya ketuban pecah dini.

Metodologi : Penelitian ini menggunakan rancangan kasus-kontrol di wilayah kerja puskesmas Kemiri II, Grabag, Bener dan Bagelen II kabupaten Purworejo, Jawa tengah pada periode Februari–Juni 2000. Sample darah diambil dari ibu hamil trimester III. Subjek penelitian dibagi dua yaitu ketuban pecah dini dan tidak ketuban pecah dini kemudian kadar seng diperiksa dengan metode AAS (Atomic Absorpsi Spektrometri) kadar seng rendah ($< 63 \mu\text{g/ml}$) dan normal atau tinggi ($\geq 63 \mu\text{g/ml}$) dan dilakukan analisis pengaruh seng terhadap ketuban pecah dini dengan melakukan uji statistik regresi logistik.

Hasil : Dari 115 ibu hamil, 78 ibu memenuhi kriteria kelayakan untuk dianalisis. Insidensi ketuban pecah dini 33.9%. Pada analisis univariat ibu hamil dengan umur kehamilan kurang dari 37 minggu lebih berisiko terjadinya ketuban pecah dini dibandingkan dengan umur kehamilan lebih dari 37 minggu (OR 2.857; 95% CI 1.077–7.577) dan kadar seng kurang dari $63 \mu\text{g/ml}$ lebih berisiko daripada kadar seng yang normal atau tinggi (OR 9.143 ;95% CI 3.185–26.246). Uji multivariat regresi logistik didapatkan risiko terjadinya ketuban pecah dini sebesar 8.432 kali pada ibu dengan kadar seng yang rendah dibandingkan dengan ibu dengan kadar seng yang normal atau tinggi (OR 8.423; 95% CI 2.892 – 24.584).

Kesimpulan : Pada penelitian ini, kadar seng yang rendah berhubungan dengan ketuban pecah dini. Diperlukan penelitian lebih lanjut mengenai peranan seng pada ketuban pecah dini. Dengan mengetahui peranan seng dalam kehamilan menjadi pertimbangan klinis untuk mengadakan intervensi sehingga dapat mencegah morbiditas dan mortalitas ibu dan janin .

Kata kunci : Kadar seng - ketuban pecah dini.

ABSTRACT

Background: Zinc deficiency increases the risk of pregnancy and delivery complication. Previous studies have been demonstrated that there was associate of low maternal zinc concentration with prolonged labor, assisted delivery, cervical and vaginal laceration, prematurity, low birth weight. However, study of the role of zinc in premature rupture of the membrane is limited. Premature rupture of the membrane is still obstetric problems because of it's high maternal and perinatal mortality and morbidity so does it's management strategies which are often controversial.

Objectives: To asses the correlation between blood zinc level and premature rupture of the membrane (PROM)

Methods: A case-control study was conducted in four primary health centers, Kemiri II, Grabag, Bener and Bagelen II at Purworejo, Central Java Province at February to June 2000. Blood samples were collected from pregnant women at 3rd Trimester. Women were classified as premature rupture of the membrane and not premature rupture of the membrane. The zinc serum concentrations were measured using Atomic Absorption Spectrometry (AAS) as low zinc serum concentration and high zinc serum concentration, which corresponded to serum zinc concentration < 63 µg/ml and ≥ 63 µg/ml, respectively. The logistic regression analysis was performed to examine the relationships between serum zinc concentration and premature rupture of the membrane.

Result: Of the 115 pregnant women who participated in the study, 78 were included in the analysis. The prevalence of PROM was 33.9%. In univariate logistic regression analysis, women with gestational age less then 37 weeks had higher risk to have premature rupture of the membrane than women with gestational age more than 37 weeks (OR 2.857; 95% CI 1.077 – 7.577) and low serum zinc concentration < 63 µg/ml had higher risk than normal or high serum zinc concentration (OR 9.143; 95% CI 3.185–26.246). The risk of having premature rupture of the membrane was 8.423 times higher among women with low serum zinc concentration compare to women with normal or high serum zinc concentration (95% CI 3.185 – 26.246). The association remained significant in multivariate logistic regression analysis.

Conclusions: In this study, low serum zinc concentration had association with premature rupture of the membrane. Further investigation is needed to elucidate the role of zinc in premature rupture of the membrane. However, zinc supplementation during pregnancy should be recommended, given the benefit of zinc in preventing maternal and perinatal morbidity as well as maternal and perinatal mortality

Keywords: zinc concentration, premature rupture of the membrane.