

ABSTRAK

PERBEDAAN RERATA KADAR *BRAIN DERIVED NEUROTROPIC FACTOR* (BDNF) ANTARA BAYI BARU LAHIR YANG DILAHIRKAN DARI IBU DENGAN KADAR FERITIN NORMAL DAN KADAR FERITIN RENDAH

Rina Gustuti, Yusrawati, Rizanda Machmud

Bagian Obstetri dan Ginekologi Fakultas Kedokteran Universitas Andalas RSUP. Dr. M. Djamil Padang

Tujuan : Mengetahui perbedaan rerata kadar *Brain Derived Neurotrophic Factor* (BDNF) antara bayi baru lahir yang dilahirkan dari ibu dengan kadar feritin normal (≥ 12 ng/ml) dan kadar feritin rendah (< 12 ng/ml).

Metode : Penelitian ini dilakukan dengan metode cross sectional dengan lokasi pengambilan sampel di RS. Yarsi Padang, RS. BMC Padang, di klinik bidan Rika Hardi Padang dan pemeriksaan sampel dilakukan di laboratorium Yarsi Padang dan laboratorium Biomedik K Unand Padang mulai dari bulan Agustus 2015 sampai dengan Februari 2016.

Hasil : Rerata kadar BDNF bayi baru lahir pada feritin maternal normal (≥ 12 ng/ml) adalah $3816,35 \pm 1370,406$ dan pada feritin maternal rendah (< 12 ng/ml) adalah $2780,25 \pm 1195,275$. Perbedaan rerata kadar BDNF bayi baru lahir antara feritin maternal normal dan rendah adalah 1036,100 dengan CI 95% 212,454-1858,746. Perbedaan rerata dua kelompok ini secara statistik bermakna ($p=0,015$).

Kesimpulan : Rerata kadar BDNF bayi baru lahir aterm lebih tinggi secara bermakna pada kadar feritin maternal normal (≥ 12 ng/ml) dibandingkan dengan kadar feritin maternal rendah (< 12 ng/ml)

Kata Kunci : Brain derived neurotrophic factor, feritin, maternal, neonatal

ABSTRACT

DIFFERENCES IN MEAN LEVEL OF *BRAIN DERIVED NEUROTROPIC FACTOR* (BDNF) BETWEEN THE NEWBORNS BABIES FROM MOTHER WITH NORMAL FERITIN LEVEL AND LOW FERITIN LEVEL

Rina Gustuti, Yusrawati, Rizanda Machmud

Bagian Obstetri dan Ginekologi Fakultas Kedokteran Universitas Andalas RSUP. Dr. M. Djamil Padang

Objective : To determine differences in mean levels of *Brain Derived Neurotrophic Factor* (BDNF) between the newborn babies from mother with normal feritin level (≥ 12 ng/ml) and low feritin level (< 12 ng/ml).

Method : This study was conducted by cross sectional method. Samples were collected in Hospital of Yarsi in Padang, Hospital of BMC in Padang, Midwife private Klinik of Rika Hardi in Padang. Samples were examined in Laboratory of Yarsi in Padang and Laboratory of Biomedik of Medical Faculty of Andalas University from August 2015 until February 2016.

Result : The mean levels of BDNF of the newborn babies from mother with normal feritin level (≥ 12 ng/ml) was $3816,35 \pm 1370,406$ and from mother with low feritin level (< 12 ng/ml) was $2780,25 \pm 1195,275$. The differences between the mean levels of BDNF of the newborn babies from mother with normal and low feritin level is 1036,100 with CI 95% 212,454-1858,746. The mean differences of these two groups were statistically significant ($p=0,015$).

Conclusion : The mean levels of BDNF of the newborns babies were significantly higher in group of maternal with normal feritin level (≥ 12 ng/ml) compared with group of maternal with low feritin level (< 12 ng/ml)

Keywords : *Brain derived neurotrophic factor*, feritin, maternal, neonatal