

ABSTRAK

PERBEDAAN RASIO SERUM SOLUBLE FMS-LIKE TYROSINE KINASE-1 (sFlt-1) DAN PLACENTAL GROWTH FACTOR (PIGF) ANTARA KEHAMILAN NORMAL DAN KEHAMILAN PREEKLAMPSIA BERAT PADA USIA KEHAMILAN 24 – 34 MINGGU

Purnomo Eko Saputro, Ermawati, Rizanda Machmud

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

Tujuan : Mengetahui perbedaan rasio serum *Soluble fms-like Tyrosine Kinase-1* (sFlt-1) dan *Placental Growth Factor* (PIGF) antara kehamilan preeklamsia berat dan kehamilan normal pada usia kehamilan 24 – 34 minggu.

Metode : Penelitian ini merupakan penelitian bersifat observasional analitik dengan menggunakan desain *cross sectional*. Penelitian dilakukan di SMF Kebidanan dan Kandungan RSUP Dr. M. Djamil Padang, RSUD Ahmad Muchtar, Puskesmas Padang Pasir dan Puskesmas Alai pada bulan Maret-September 2016. Populasi penelitian adalah wanita dengan kehamilan preeklamsia berat (kasus) pada usia kehamilan 24 – 34 minggu yang melakukan pemeriksaan ke SMF Kebidanan dan Kandungan RSUP Dr. M. Djamil dan RSUD Ahmad Muchtar serta wanita dengan kehamilan normal (kontrol) pada usia kehamilan 24 – 34 minggu yang melakukan pemeriksaan ke Puskesmas Padang Pasir dan Puskesmas Alai. Sampel penelitian berjumlah 30 orang pada masing-masing kelompok. Analisis data dilakukan secara univariat dan bivariat dengan menggunakan uji T Independent.

Hasil: Rerata kadar serum sFlt-1 lebih tinggi pada kehamilan preeklamsia berat yaitu $17.490 \text{ pg/ml} \pm 9.463 \text{ pg/ml}$ dibandingkan pada kehamilan normal yaitu $4.701 \text{ pg/ml} \pm 1.596 \text{ pg/ml}$. Hasil uji statistik didapatkan nilai $p=0,000$ ($p \text{ value} < 0,05$) maka dapat disimpulkan terdapat perbedaan rerata kadar serum sFlt-1 pada kehamilan preeklamsia berat dan kehamilan normal. Rerata kadar serum PIGF lebih rendah pada kehamilan preeklamsia berat yaitu $48,04 \text{ pg/ml} \pm 7,48 \text{ pg/ml}$ dibandingkan pada kehamilan normal $1008,45 \text{ pg/ml} \pm 312,13 \text{ pg/ml}$. Hasil uji statistik didapatkan nilai $p=0,000$ ($p \text{ value} < 0,05$) terdapat perbedaan rerata kadar serum PIGF pada kehamilan preeklamsia berat dan kehamilan normal. Kadar rasio serum sFlt-1 dan PIGF pada kehamilan preeklamsia berat lebih tinggi dibandingkan dengan kadar rasio serum sFlt-1 dan PIGF pada kehamilan normal. Hasil uji statistik didapatkan nilai $p=0,000$ ($p \text{ value} < 0,05$) terdapat perbedaan rasio kadar serum sFlt-1 dan PIGF antara kehamilan preeklamsia berat dan kehamilan normal.

Kesimpulan : Terdapat perbedaan rasio kadar serum sFlt-1 dan PIGF antara kehamilan preeklamsia berat dan kehamilan normal.

Kata Kunci : sFlt1, PLGF, PEB

ABSTRACT

THE DIFFERENCE RATIO OF SOLUBLE FMS-LIKE TYROSINE KINASE-1 (sFlt-1) AND PLACENTAL GROWTH FACTOR (PLGF) SERUM BETWEEN NORMAL PREGNANCY AND HEAVY PREECLAMPSIA AT 24-34 WEEKS GESTATION

Purnomo Eko Saputro, Ermawati, Rizanda Machmud

Department of Obstetrics and Gynecology Faculty of Medicine
Andalas University Dr. M. Djamil Central General Hospital Padang

Objective: To know the difference ratio of soluble fms-like tyrosine kinase-1 (sFlt-1) and placental growth factor (PLGF) serum between normal pregnancy and heavy preeclampsia at 24-34 weeks gestation

Methods: This research was observational analytic using cross sectional design. The study was conducted in Obstetrics and Gynecology Dr. M. Djamil Central General Hospital Padang, Ahmad Muchtar Hospital, Padang Pasir and Alai Primary Health care in March to September 2016. The study population was women with heavy preeclampsia pregnancies (cases) at 24-34 weeks gestation of check up to Obstetrics and Gynecology Dr. M. Djamil Central General Hospital Padang and Ahmad Muchtar Hospital and also women with normal pregnancy (control) on 24-34 weeks gestation of check up to Padang Pasir and Alai Primary Health care. These samples included 30 people in each group. Data analysis was performed using univariate and bivariate using T test Independent.

Results: The mean serum levels of sFlt-1 is higher in pregnancies with heavy preeclampsia, $17.490 \text{ pg / ml} \pm 9463 \text{ pg / ml}$ than in normal pregnancy is $4.701 \text{ pg / ml} \pm 1.596 \text{ pg / ml}$. Statistical test result p value = 0.000 (p value <0,05), it can be concluded there is a difference in the mean serum levels of sFlt-1 in pregnancy with heavy preeclampsia and normal pregnancy. The mean serum PIGF levels were lower in pregnancies with heavy preeclampsia is $48,04 \text{ pg / ml} \pm 7,48 \text{ pg / ml}$ compared to normal pregnancy $1008,45 \text{ pg / ml} \pm 312,13 \text{ pg / ml}$. Statistical test result p value = 0,000 (p value <0,05) there are differences between the mean serum PIGF levels in pregnancy with heavy preeclampsia and normal pregnancy. The ratio of serum levels of sFlt-1 and PIGF in pregnancy with heavy preeclampsia is higher than the ratio of serum levels of sFlt-1 and PIGF in normal pregnancy. Statistical test result p value = 0,000 (p value <0,05) there are differences in the ratio of serum levels of sFlt-1 and PIGF between pregnancies with heavy preeclampsia and normal pregnancy

Conclusion : There are differences in the ratio of serum levels of sFlt-1 and PIGF between pregnancies with heavy preeclampsia and normal pregnancy.

Keywords : sFlt1, PLGF, Heavy Preeclampsia.