

## **Peran Dosis Aspirin dalam Menurunkan Resistensi Arteri Uterina Pada Ibu Hamil 16-24 minggu dengan Resistensi Arteri Uterina Abnormal**

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### **ABSTRAK**

**Tujuan:** Menganalisis perbandingan penurunan resistensi pembuluh darah arteri uterina pada ibu hamil yang sebelumnya didapatkan peningkatan resistensi arteri uterina dari pemeriksaan USG doppler velocimetry usia kehamilan 16-24 minggu yang mendapatkan terapi aspirin dosis rendah 80 mg/hari dan 125 mg/hari.

**Metode:** Merupakan penelitian jenis eksperimental dengan desain uji klinis tersamar ganda randomisasi (*double blind randomized clinical trial*). Subjek penelitian berasal dari puskesmas Mulyorejo dan Kalijudan Surabaya, usia kehamilan 16-24 minggu dengan hasil USG *doppler velocimetry* arteri uterina abnormal. Hasil pemeriksaan USG doppler arteri uterina dibagi menjadi empat tingkatan yaitu; normal bila  $RI \leq 0,58$  tanpa adanya *notching*, tingkat I jika  $RI > 0,58$  tanpa adanya *notching*, tingkat II  $RI \leq 0,58$  disertai *notching* dan tingkat III bila  $RI > 0,58$  disertai adanya *notching*. Pemeriksaan USG doppler arteri uterina dilakukan di Departemen/SMF Obstetri dan Ginekologi Fakultas Kedokteran Universitas Airlangga-RSUD Dr. Soetomo, divisi Feto-Maternal, oleh konsultan feto-maternal sebelum dan sesudah pemberian aspirin dosis rendah 125 mg/hari dan 80 mg/hari selama empat minggu.

**Hasil:** 90 subyek penelitian yang ikut penelitian, dilakukan randomisasi menjadi 2 kelompok, 45 subyek kelompok 125 mg/hari dan 45 subyek kelompok 80 mg/hari; Pada kelompok aspirin 125 mg/hari didapatkan hasil USG DV tingkat-1: 34 subyek, tingkat 3: 11 subyek. Pada kelompok aspirin 80 mg/hari didapatkan hasil USG DV Tingkat-1: 41 subyek, Tingkat-2: 2 subyek dan Tingkat-3: 2 subyek. Setelah mendapatkan terapi aspirin selama 4 minggu, dilakukan USG DV kedua dengan hasil pada kelompok aspirin 125 mg/hari: Normal: 40 subyek, Tingkat-1: 4 subyek dan Tingkat-3: 1 subyek. Sedangkan pada kelompok aspirin 80 mg/hari: Normal: 22 subyek, Tingkat-1: 19 orang dan Tingkat-3: 4 subyek. Dilakukan analisis dengan uji Wilcoxon sebelum dan sesudah perlakuan pada kedua kelompok aspirin 125 mg/hari dan 80 mg/hari dengan nilai p berturut turut,  $p = 0,001$  dan  $p = 0,005$ .

**Kesimpulan:** Aspirin 125 mg / hari menurunkan resistensi arteri uterina pada ibu hamil usia kehamilan 16-24 minggu lebih banyak dibandingkan dengan Aspirin 80 mg/hari.

**Kata kunci:** resistensi arteri uterina, USG *doppler velocimetry*, aspirin dosis rendah

***Role of Aspirin Dose in Decreasing Uterine Arterial Resistance in Pregnant Women 16-24 weeks with Abnormal Uterine Arterial Resistance***

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**ABSTRACT**

**Objective:** To analyze comparison the decreasing of resistance index from uterine artery in pregnant woman who received low dose aspirin therapy between 80 mg / day and 125 mg / day whose having abnormal doppler velocimetry ultrasound examination at 16-24 weeks

**Methods:** It is an exprimental research with double blind randomized clinical trial design. The subjects were from Mulyorejo and Kalijudan Public health sercvic Surabaya, 16-24 weeks of gestation with abnormal uterine velocimetry ultrasound. The results of ultrasound doppler examination is divided into four levels; normal if RI <0.58 without a notching, level I if RI > 0,58 without the notching, level II RI <0,58 with notching and level III if RI > 0,58 with notching. Uterine doppler ultrasound examination was performed at Department Obstetrics and Gynecology Faculty of Medicine Airlangga University -Dr. Soetomo hospital, the Feto-Maternal division, by fetal-maternal consultants before and after the administration of low-dose aspirin 125 mg / day and 80 mg / day for four weeks.

**Results:** 90 study subjects who participated in the study were obtained, randomized into 2 groups, and divided into 45 subject each. Before treatment: In the 125 mg / day group there was a level 1: 34 subject, level 3: 11 subject. In the 80 mg / day group, level-1: 41 subject, level 2: 2 subject and 3-level: 2 subject. After 4 weeks of treatment, a second DV USG was performed in Aspirin 125 mg/ day group: normal: 40 subject, level -1: 4 subject and level-3: 1 subject. In aspirin group 80 mg/day: normal: 22 subject, level-1: 19 subject and level-3: 4 subject. The analysis was performed with Wilcoxon test before and after treatment in both aspirin treatment group 125 mg/day and 80 mg/day with p value respectively, p = 0.001 and p = 0.005.

**Conclusion:** Aspirin 125 mg / day more superiorly to decreased uterine arterial resistance in pregnant women with ultrasound uterine arterial doppler velocimetry of 16-24 weeks gestational age compared with aspirin 80 mg / day

**Keywords:** uterine artery resistance, doppler velocimetry ultrasound, low dose aspirin