

**KORELASI FAKTOR PRO INFLAMASI TNF- $\alpha$  DAN  
INTERLEUKIN 6 SERUM DENGAN CADANGAN  
OVARIUM PADA PENDERITA KISTA  
ENDOMETRIOSIS**

TESIS



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## ABSTRAK

**Tujuan :** Mengetahui korelasi faktor pro inflamasi (TNF- $\alpha$  dan IL-6) dengan cadangan ovarium pada penderita kista endometriosis.

**Metode :** Penelitian ini merupakan penelitian analitik kuantitatif dengan desain cross sectional study. Jumlah sampel sebanyak 25 orang. Teknik Pengambilan sampel consecutive sampling. Penelitian ini dimulai Juni 2019 sampai dengan jumlah sampel terpenuhi di Poliklinik Obstetri dan Ginekologi Rumah Sakit Umum Pusat Dr. M. Djamil Padang dan di Laboratorium Biomedik Fakultas Kedokteran Universitas Andalas Padang. Untuk mengetahui korelasi TNF- $\alpha$ , IL-6, dan AMH pada penderita kista endometriosis. Pemeriksaan kadar TNF- $\alpha$ , IL-6, dan AMH dilakukan dengan cara kuantitatif, menggunakan metode ELISA.

**Hasil :** Rerata kadar AMH adalah  $2 \pm 0,40$  pmol/L dan kadar TNF- $\alpha$   $11,16 \pm 4,79$  pg/ml. Korelasi kadar AMH dengan TNF- $\alpha$  menunjukkan nilai  $r = -0,049$  yang memiliki kekuatan lemah dan berpola negatif artinya semakin tinggi kadar TNF- $\alpha$  maka semakin rendah kadar AMH. Hasil analisis menunjukkan bahwa tidak terdapat korelasi antara kadar TNF- $\alpha$  dengan kadar AMH pada penderita kista endometriosis ( $p > 0,05$ ). Korelasi kadar AMH dengan IL-6 menunjukkan nilai  $r = 0,35$  yang memiliki kekuatan sedang dan berpola positif artinya semakin tinggi kadar IL-6 maka semakin tinggi kadar AMH. Hasil analisis menunjukkan bahwa tidak terdapat korelasi antara kadar IL-6 dengan kadar AMH pada penderita kista endometriosis ( $p > 0,05$ ).

**Kesimpulan :** Terdapat korelasi negatif kadar TNF- $\alpha$  dengan kadar AMH pada penderita kista endometriosis, yaitu semakin tinggi kadar TNF- $\alpha$  maka semakin rendah kadar AMH dan terdapat korelasi positif kadar IL-6 dengan kadar AMH pada penderita kista endometriosis. Dimana semakin tinggi kadar IL-6 maka semakin tinggi kadar AMH.

**Kata Kunci :** TNF- $\alpha$ , IL-6, AMH, Endometriosis

## ABSTRACT

**Objective :** To know the correlation between pro-inflammatory factors (TNF- $\alpha$  and IL-6) with ovarian reserve in patients with endometriosis cysts.

**Method :** This research is a quantitative analytic study with cross sectional study design. The number of samples is 25 people. Sampling technique consecutive sampling. The study began in June 2019 until the number of samples was fulfilled at the Obstetrics and Gynecology Polyclinic of the Dr. General Central Hospital M. Djamil Padang and at the Biomedical Laboratory of the Faculty of Medicine, Andalas University, Padang. To determine the correlation of TNF- $\alpha$ , IL-6, and AMH in patients with endometriosis cysts. Examination of TNF- $\alpha$ , IL-6, and AMH levels was carried out in a quantitative manner, using the ELISA method.

**Result :** The mean AMH level was  $2 \pm 0.40$  pmol / L and TNF- $\alpha$  level was  $11.16 \pm 4.79$  pg / ml. Correlation of AMH level with TNF- $\alpha$  indicates the value of  $r = -0.049$  which has weak strength and negative pattern means that the higher the TNF- $\alpha$  level, the lower the AMH level. The analysis showed that there was no correlation between TNF- $\alpha$  levels and AMH levels in patients with endometriosis cysts ( $p > 0.05$ ). Correlation of AMH levels with IL-6 shows the value of  $r = 0.35$  which has moderate strength and positive pattern means that the higher the IL-6 level, the higher the AMH level. The analysis showed that there was no correlation between IL-6 levels and AMH levels in patients with endometriosis cysts ( $p > 0.05$ ).

**Conclusion :** There is a negative correlation of TNF- $\alpha$  levels with AMH levels in patients with endometriosis cysts, namely the higher TNF- $\alpha$  levels, the lower AMH levels and there is a positive correlation of IL-6 levels with AMH levels in patients with endometriosis cysts. Where the higher levels of IL-6, the higher levels of AMH.

**Keyword :** TNF- $\alpha$ , IL-6, AMH, endometriosis