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The Differences of $\alpha_v\beta_3$ Expressions in Endometrium Treated with Clomiphene Citrate, Combination of Clomiphene Citrate and Metformin or Metformin Alone A Study on Rattus novergicus Wistar Strain, a Polycystic Ovary Syndrome Model

Beda Ekspresi $\alpha_v\beta_3$ pada Endometrium setelah Pemberian Klomifen Sitrat, Kombinasi Klomifen Sitrat dan Metformin, atau Metformin Suatu Penelitian pada Rattus novergicus Strain Wistar sebagai Model Sindroma Ovarium Polikistik

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Abstract

The objective of this study was to evaluate the differences of $\alpha_v\beta_3$ expressions in endometrium of polycystic ovary syndrome model, which were treated with clomiphene citrate, or combination of clomiphene citrate and metformin, or metformin alone. Thirty five rats (Rattus novergicus Wistar strain) of polycystic ovary syndrome model were divided in 7 groups. One group was treated with placebo, 2 groups were treated with clomiphene citrate 1 mg/200 g BW for 2 days and 5 days. Two groups were treated with combination of clomiphene citrate 1 mg/200 g BW and metformin 30 mg/200 g BW, for 2 and 5 days; The other 2 groups were treated with metformin alone 30 mg/200 g BW for 2 and 4 days. In Kelompok 1, the $\alpha_v\beta_3$ integrin expressions of rats in subgroup P4 were higher than P2, $p = 0.008$. So $\alpha_v\beta_3$ expressions of rats in subgroup P6 were higher than P2, $p = 0.008$. But if P2, P4 and P6 subgroups were compared there were differences of $\alpha_v\beta_3$ expressions which statistically significant to each subgroups, $p = 0.010$. Integrin $\alpha_v\beta_3$ expressions between 2 subgroups with same treatment, from 2 groups, were also compared. There were differences of integrin expressions between P2 and P3 which statistically significant, $p = 0.008$, between P3 and P4 the differences also statistically significant, $p = 0.016$; and so the differences between P6 and P7, $p = 0.008$. The conclusion is clomiphene citrate has estrogenic effect that could suppress epithelial luminal of integrin expressions, specifically on the hyperandrogenic endometrium. But after the treatment with metformin or combination of clomiphene citrate and metformin there were improvement of hyperandrogenic environment and stimulating ovulation, uterus receptivity getting normal so $\alpha_v\beta_3$ would be expressed. The longer the treatment, integrin expressions was more increased in the same treatment group.

Keyword : $\alpha_v\beta_3$, integrin, expressions, endometrium, uterus, receptivity, clomiphene, citrate, and, metformin.

Daftar Pustaka :
1. Homburg R, (0000). Pregnancy complications in PCOS. :
2. Dunaif A, (0000). :
3. Speroff L, Fritz MA (ed), (0000). :