Perbandingan ekspresi mRNA PPAR gamma (proliferator activated receptor gamma) jaringan endometrium subjek endometriosis dan nir endometriosis = Comparison between expression of mRNA of peroxisome proliferator activated receptor gamma in endometrial subject of endometriosis and non-endometriosis.

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Abstrak

Latar Belakang: Endometriosis menjadi penyakit dengan teka-teki yang memerlukan penyelesaian. Prevalensinya bervariasi dengan rentang yang luas. 0,7-44% pada populasi umum. 26,5% pada kelompok 40-44 tahun, namun 52,7% pada usia 18-29 tahun. Ilmu, tehnologi dan penelitian yang ada belum menghasilkan terapi terkini menurunkan prevalensinya. Anti inflamasi non-steroid terapi non-hormonal penghilang nyeri mempunyai efek samping pada pemakaian jangka panjang, terapi hormonal mempengaruhi siklus menstruasi dan fertilitas. Modalitas terapi perlu dikembangkan mengatasi endometriosis. Peroxisome Proliferator Activated Receptor gamma merupakan faktor transkripsi terikat pada membran nukleus sebagai anti inflamasi potensial. Aktivasi PPAR gamma oleh ligan menghambat faktor transkripsi nuclear factor-κB menurunkan ekspresi gen sitokin inflamasi, menurunkan TNF α, menginduksi sekresi IL-8 menghambat proliferasi sel. Agonis selektif PPARγ diharapkan menjadi pilihan terapi non-hormonal jangka panjang endometriosis masa mendatang. Belum ada penelitian mengevaluasi ekpresi PPARγ pada jaringan endometrium endometriosis dan tidak endometriosis.
Tujuan: Penelitian ini membandingkan ekpresi mRNA PPARγ endometrium subjek endometriosis dan tidak endometriosis.
Metode: Penelitian potong lintang pada Desember 2016-Oktober 2017 di Kamar Operasi RS Ciptomangunkusumo. Dua puluh lima pasien endometriosis yang menjalani laparoskopi atau laparotomi yang memenuhi syarat penelitian direkrut consecutive sampling diperiksa tampilan PPAR Gamma pada dinding endometrium endometriosis dan tidak endometriosis; jaringan endometriosis dari dinding kista endometriosis. Ekspresi PPAR Gamma diperiksa menggunakan two step real time PCR. Penelitian ini disetujui oleh Komite Etik dan Penelitian tahun 2016.
Hasil: Ekspresi PPARγ endometrium subjek endometriosis dan tidak endometriosis tidak berbeda bermakna (p 0,58). Ekspresi mRNA PPARγ jaringan endometrium dan endometriosis subjek endometriosis tidak berbeda bermakna (p 0,89). Ekspresi PPARγ jaringan endometriosis dan endometrium subjek tidak endometriosis tidak berbeda bermakna (p 0,68).
Kesimpulan: Penilaian ekspresi mRNA PPARγ belum dapat digunakan sebagai dasar target terapi endometriosis. Penelitian lanjutan memisahkan jaringan epitel dan stromanya dapat dilakukan untuk membuktikan peran PPARγ pada patogenesis endometriosis.
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Background: Endometriosis becomes a disease with a puzzle that requires completion. Prevalence varies with wide ranges. 0.7-44% in the general population. 26.5% in the 40 to 44 years group, but 52.7% at the age of 18-29 years. Existing science and research have not resulted in current therapy reducing its prevalence. Non-steroidal antiinflammatory non-hormonal pain relief therapy has side effects on long-term

use, hormonal therapy affects the menstrual cycle and fertility. Therapeutic modalities need to be developed to overcome endometriosis. Peroxisome Proliferator Activated Receptor gamma is a transcription factor bound to the nuclear membrane as a potential anti-inflammatory. Activation of gamma PPAR by ligand inhibits nuclear factor-κB transcription factor decreases expression of inflammatory cytokine gene, decreases TNF α, inducing IL-8 secretion inhibiting cell proliferation. PPAR sel-selective agonists are expected to be the preferred long-term non-hormonal therapy of future endometriosis.
Objective: This study compared PPAR expression in endometriosis and endometrial subjects of endometriosis and not endometriosis.
Method: Cross-sectional study in December 2016-October 2017 at Operation Room of RS Ciptomangunkusumo. Twenty-five endometriosis patients undergoing laparoscopy or laparotomy who qualified for the study were recruited consecutive sampling examined PPAR Gamma display on the endometrial wall of endometriosis and not endometriosis; endometriosis of the cervical wall of endometriosis. The PPARγ expression was examined using two step real time PCR. The study was approved by the Ethics and Research Committee of 2016.
Result: The PPAR expression of the endometrium of endometriosis and nonendometriosis did not differ significantly (p 0.58). Expression of PPAR gamma endometrial and endometriosis tissue subject of endometriosis was not significantly different (p 0.89). PPAR expression of endometriosis and endometrial tissue of the subjects not endometriosis was not significantly different (p 0.68).
Conclusion: PPAR expressivity assessment has not been used as a target for endometriosis therapy. Further studies separating epithelial tissue and stroma can be performed to prove the role of PPARγ in the pathogenesis of endometriosis.