Korelasi kadar hCG serum 12 jam pasca penyuntikan dan ekspresi mRNA reseptor LH sel granulosa terhadap maturitas oosit = Correlation HCG serum level 12 hours post trigger and expression of mRNA granulosa cells with oocyte maturation rate / Hilwah Nora

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Abstrak

ABSTRAK
Pengantar: Dalam siklus teknologi reproduksi berbantu TRB , sebanyak 30 oosit ditemukan dalam keadaan immatur, oosit immatur ini akan yang memiliki kapasitas maturasi dan fertilisasi yang rendah, dan jarang sampai ketahap embrio transfer, namun faktor-faktor yang menyebabkan terjadinya hal in belum diketahui secara luas. Tujuan: Untuk melihat hubungan antara maturitas oosit dengan kadar hCG serum 12 jam pasca penuntikan dan ekspresi mRNA LHR sel granulosa pada siklus TRB. Untuk menilai apakah kadar hCG serum dan ekspresi LHR ini bisa memprediksi laju maturasi oosit pada siklus TRB. Material dan Metode: total 30 sampel normoresponder yang mengikuti TRB dengan protocol antagonis dianalisa secra prospektif. Dua belas jam setelah penyuntikan hCG, kadar hCG serum diukur dan petik oosit melalui USG transvaginal dilakukan 35-36 jam kemudian. Sel granulosa oosit diperoleh saat denudasi oosit untuk proses intracytoplasmic sperm injection ICSI dan sel granulosa ini kemudian diproses RNA prufikasi, reverse transcription dan quantitative real-time polymerase chain reaction PCR . Oosit yang diperoleh saat itu langsung dinilai maturasinya. Test korelasi Pearson dilakukan untuk menilai korelasi laju maturasi oosit dengan kadar hCG dan ekspresi mRNA LHR. Analisa Receiver Operating Characteristic ROC dilakukan untuk menentukan nilai cut-off. Hasil: Kadar hCG seum memiliki korelasi positif dengan maturitas oosit r 0.467, p
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ABSTRACT
Introduction During stimulated in vitro fertilization IVF cycle, up to 30 of the recovered oocytes are immatur ones which have lower maturation capacity, poor fertilization capacity and seldom yield transferable embryos however, the precise influencing factors are largely unknown. Aim To investigate the association of oocyte maturation with serum hCG levels measured 12 hours after trigger and LHr mRNA expression of granulosa cell in IVF cycles. To find out whether this serum hCG levels and expression of mRNA LHr granulosa cell can predict oocyte maturation rate in IVF cycles. Material and Method A total of 30 normoresponder IVF cycles stimulated by antagonist protocol were analyzed prospectively. Twelve hours after triggering by exogenous hCG, level of hCG serum was measured and an ultrasound guided retrieval of oocytes was performed 35 36 hours later. Granulosa cells were obtained during oocyte denudation for intracytoplasmic sperm injection ICSI procedures and subjected to total RNA purification, reverse transcription and quantitative real time polymerase chain reaction PCR . Oocytes were stripped immediately after retrieval and maturation was assessed at this time. Pearson 39 s correlation test performed to analyze the correlation of oocyte maturation rate with serum hCG level and expression mRNA LHR. Receiver operating characteristic ROC analysis was performed to determine cut off value. Result Serum hCG have positive correlation with oocyte maturation r 0.467, p