Ekspresi Immediate Early Response Gene X-1 (IEX-1) Saliva Sebagai Prediktor Keganasan Pada Tumor Ovarium Epitelial Di RSUPN Dr. Cipto Mangunkusumo Jakarta = Salivary Immediate Early Response Gene X-1 (IEX-1) Expression as a Predictor of Malignancy in Epithelial Ovarian Tumors at RSUPN Dr. Cipto Mangunkusumo Jakarta

Nasution, Hiro Hidaya Danial, author

Abstrak

Latar Belakang : Sampai saat ini kanker ovarium masih menjadi salah satu kanker dengan angka mortalitas yang tinggi pada wanita dikarenakan tidak dijumpainya gejala yang khas sehingga lebih banyak kasus terdiagnosis pada stadium lanjut. Belum adanya metode skrining menjadikan pentingnya metode diagnostik yang mempunyai sensitivitas dan spesifisitas yang tinggi. Evaluasi biomarker yang baru diperlukan untuk dapat mendeteksi tumor ovarium ganas pada stadium awal.
Objektif : Penelitian ini dilakukan untuk menilai ekspresi Immediate Early Response Gene X-1 (IEX-1) saliva sebagai prediktor keganasan pada tumor ovarium epitelial.
Metode : Merupakan penelitian uji diagnostik pada pasien tumor ovarium yang direncanakan operasi elektif dengan mengambil 3-5 ml saliva pasien sebelum tindakan operasi. Subjek penelitian yang memenuhi kriteria inklusi dan eksklusi dibagi menjadi dua kelompok berdasarkan hasil histopatologi yaitu tumor ovarium epitelial jinak dan ganas. Dilakukan pemeriksaan ekspresi IEX-1 saliva dengan metode Real Time qPCR.
Hasil : Hasil penelitian ini didapat dari 47 subjek, 22 subjek tumor ovarium epitelial ganas dan 25 subjek merupakan tumor ovarium epitelial jinak. Rerata ekspresi IEX-1 saliva lebih tinggi pada tumor ovarium epitelial jinak (1,976) dibandingkan ganas (0,554) (p<0,001). Didapatkan nilai AUC ekspresi IEX-1 0,949 (IK95% 0,894-1,000), nilai cut off point IEX-1 saliva 0.9115 dengan sensitivitas 84%, spesifisitas 86,4%, nilai duga positif 82,6% dan nilai duga negatif 87,5%. Terdapat hubungan yang signifikan antara ekspresi IEX-1 saliva dengan kejadian tumor ovarium epitelial ganas (OR 5,031, IK95% 2,039-12,41; p<0,001).
Kesimpulan : Terdapat hubungan yang bermakna antara penurunan ekspresi IEX-1 saliva dengan kejadian tumor ovarium epitelial ganas dengan sensitivitas dan spesifisitas yang cukup baik.
.....Backgound: Ovarian cancer is still one of the cancers with a high mortality rate in women because there are no typical symptoms so that more cases are diagnosed at an advanced stage. The absence of a screening method makes the importance of a diagnostic method that has high sensitivity and specificity. Evaluation of new biomarkers is needed to detect malignant ovarian tumors at an early stage.
Objectives: This study was conducted to assess the expression of salivary Immediate Early Response Gene X-1 (IEX-1) as a predictor of malignancy in epithelial ovarian tumors.
Methods: This is a diagnostic test study in ovarian tumor patients who are planned for elective surgery by taking 3-5 ml of patient's saliva before surgery. Research subjects who met the inclusion and exclusion criteria were divided into two groups based on the histopathological results, benign and malignant epithelial ovarian tumors. The salivary IEX-1 expression was examined using the Real Time qPCR method.
Results: The results of this study were obtained from 47 epithelial ovarian tumors subjects, 22 malignant tumors and 27 benign tumors. The mean salivary IEX-1 expression was higher in benign epithelial ovarian

tumors (1.976) than in malignant (0.554) ($p<0.001$). The AUC expression value of IEX-1 was 0.949 (95% CI 0.894-1,000), salivary IEX-1 cut off point value was 0.9115 with sensitivity 84%, specificity 86.4%, positive predictive value 82.6% and negative predictive value 87, 5%. There was a significant relationship between salivary IEX-1 expression and the event of malignant epithelial ovarian tumors (OR 5.031, 95% CI 2.039-12.41; $p<0.001$).
Conclusions: There is a significant correlation between decreased salivary IEX-1 expression and the event of malignant epithelial ovarian tumors with a good sensitivity and specificity.