

ABSTRACT

Thesis title: Evaluation of paraclinical characteristics and related factors in ovarian cancer patients with high and low mutation risk in Vietnam

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This study evaluates the paraclinical characteristics of ovarian cancer patients and identifies several factors that may be associated with the risk of carrying gene mutations in patients at several tertiary cancer treatment hospitals in Vietnam. Using a retrospective cross-sectional study design, 223 medical records were collected, showing that 43.5% of patients were classified as high-risk carriers of the BRCA gene mutation, and the remaining 56.5% were low-risk carriers. Most paraclinical indicators of ovarian cancer patients were within normal ranges, and there were largely no differences between the two patient groups. However, the mean values of indicators such as red blood cell count, MCH, %LYM, MPV, fibrinogen determination, creatine, glucose, two liver enzyme indicators (SGOT and SGPT), urea, albumin, and two cancer markers, CA125 and HE4, showed statistically significant differences between high-risk and low-risk groups carrying gene mutations ($p < 0.05$). Among these paraclinical indicators, red blood cell count, MCH, %LYM, urea, and albumin were factors associated with the likelihood of carrying gene mutations in ovarian cancer patients in the univariate logistic regression analysis model. However, after adjustment in the multivariate logistic regression model, only MCH and albumin remained independently associated with the risk of carrying gene mutations in ovarian cancer patients. The research findings provide a new approach to early risk assessment of gene mutations in ovarian cancer patients, thereby contributing to improved treatment outcomes and cost savings for patients.