EXPRESSION OF Ki-67 IMMUNOHISTOCHEMISTRY IN BORDERLINE OVARIAN TUMOR

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Abstract

Ovarian tumor is the forth most common female cancer in Malaysia. Surface epithelial tumor is 90% of all ovarian tumors. Therefore, this type tumor has been chosen to look for different expression of benign, borderline and malignant epithelial tumor for Ki-67 immunohistochemical staining.

Most of cysts found usually more than 5cm in largest diameter. It is important for the pathologist to incise adequate sample in order to get correct diagnosis for the patient.

From the study, we found there is significant difference between these three types of ovarian tumors. However, there is no significant difference Ki-67 staining between morphologically borderline areas and morphologically malignant areas in a confirmed case of malignant case.

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In the name of God, the most gracious, the most merciful

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1.0   INTRODUCTION

Ovarian tumour become the sixth most common female cancer worldwide with 200,000 new cases diagnosed each year and 5.8% of overall registered cancer cases reported to National Cancer Registry, Ministry of Health Malaysia makes ovarian cancer as the forth frequent cancer of women in Peninsular Malaysia in 2007. In female genitourinary tract system, ovarian cancer is the most known cancer to cause death. It is usually occurs in women at the age of 45-60 years old.

Tumors of ovary can be classified into type of cell that the tumor arise; there are surface epithelial account for 65%, germ cell (15%) and sex cord-stromal cell (10%), metastasis and miscellaneous. The aggressiveness of ovarian tumor presented as benign, low malignant potential (borderline) and malignant tumor. The diagnosis is based on the evidence of stromal invasion and cellular atypia. The epithelial type is account for 90% of all ovarian tumors, therefore this type of tumor is chosen for our research.

Recently, the screening of ovarian tumor is by blood test to measure CA 125. The CA 125 is a well known biomarker that will be elevated in the blood in ovarian cancer patient and stands for cancer antigen. The normal value of CA 125 in our body is < 35 U/mL. However, CA 125 lack of sensitivity and inability to detect early stage cancers. In some cases radiological test may help in diagnosis and sometime the less invasive method is needed to assist like laparoscopy. However to determine the aggressiveness of the tumor, the histopathological assessment is still required. Most of the time the tumour