

# ACCURACY OF INTRA-OPERATIVE FROZEN SECTION AND ITS ROLE IN THE DIAGNOSTIC EVALUATION OF OVARIAN TUMORS: A RETROSPECTIVE ANALYSIS OF 804 CASES

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Ovarian malignancy is a leading cause of mortality among women with gynaecological cancers. In cases of ovarian tumours, intra-operative frozen section plays an important role because definitive pre-operative histology is not possible. Retrospective study of 804 ovarian frozen section results between Jun' 2010 and Jun' 2014 was examined to determine the accuracy and role of intra-operative frozen section in the diagnosis of ovarian tumors, in pathologic department of First Affiliated Hospital of Xinjiang Medical University, China. For each biopsy, the frozen section diagnosis was compared with the definitive paraffin diagnosis. According to the status of malignancy, the overall accuracy and four conventional indices (sensitivity, specificity, positive predictive value (PPV), and negative predictive value (NPV)) of frozen section diagnosis were determined. The overall accuracy to determine the status of malignancy was 92.6%. There were 38 (7.4%) false negative and no false positive frozen section diagnosis. The sensitivity, specificity, PPV and NPV for benign ovarian tumors were 100.0%, 97.0%, 91.3% and 100.0%, respectively; for borderline tumors they were 64.3%, 97.0%, 91.5% and 94.0%, respectively; and for malignant tumors they were 90.0%, 100.0%, 100.0% and 85.5%, respectively. The study concluded that intra-operative frozen section is a beneficial and vital test for diagnosing benign and malignant ovarian tumors, with some limitations observed among the diagnosis of borderline and mucinous tumors.

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