

SENSITIVITAS DAN SPESIFISITAS SITOLOGI *IMPRINT* DAN *FROZEN SECTION* INTRAOPERATIF TERHADAP HISTOPATOLOGI PADA TUMOR OVARIUM DI RSUP DR SOERADJI TIRTONEGORO

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ABSTRAK

Latar belakang : Kanker ovarium merupakan salah satu penyebab kematian akibat kanker yang tinggi karena sering terdiagnosis pada stadium lanjut. Pemeriksaan histopatologi merupakan baku emas diagnosis, namun tidak dapat memberikan hasil secara cepat selama pembedahan berlangsung. Oleh karena itu, pemeriksaan intraoperatif seperti sitologi *imprint* dan *Frozen section* digunakan untuk membantu pengambilan keputusan klinis secara real time.

Tujuan penelitian: Menilai sensitivitas dan akurasi sitologi *imprint* dan *Frozen section* intraoperatif dalam mendeteksi keganasan tumor ovarium dibandingkan dengan pemeriksaan histopatologi sebagai baku emas.

Metode Penelitian: Penelitian ini merupakan uji diagnostik dengan desain potong lintang (cross-sectional) menggunakan data sekunder dari arsip Laboratorium Patologi Anatomi RSUP dr. Soeradji Tirtonegoro Klaten periode Agustus 2025– Mei 2026. Sampel penelitian sebanyak 61 kasus tumor ovarium, dengan 27 kasus jinak dan 34 kasus ganas (termasuk tipe *borderline* yang dikategorikan sebagai ganas). Analisis dilakukan menggunakan tabel krostabulasi 2×2 untuk menghitung sensitivitas, spesifisitas, nilai prediksi positif, nilai prediksi negatif, dan akurasi

Hasil Penelitian: Sitologi *imprint* menunjukkan sensitivitas 91,18%, spesifisitas 100% dan akurasi 95,08%. *Frozen section* menunjukkan sensitivitas 97,06%, spesifisitas 100% dan akurasi 98,36%.

Kesimpulan: *Frozen section* memiliki akurasi dan sensitivitas yang lebih tinggi dibandingkan sitologi *imprint*, namun sitologi *imprint* memiliki akurasi dan sensitivitas yang tinggi yaitu lebih dari 80% sehingga dapat digunakan sebagai pemeriksaan screening terutama ketika fasilitas *Frozen section* tidak tersedia atau mengalami kendala.

Kata Kunci: Sitologi *imprint*, *Frozen section*, tumor ovarium, uji diagnostik, akurasi

*SENSITIVITY AND SPECIFICITY OF INTRAOPERATIVE IMPRINT
CYTOLOGY AND FROZEN SECTION COMPARED WITH
HISTOPATHOLOGICAL EXAMINATION IN OVARIAN TUMORS AT DR.
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ABSTRACT

Background : Ovarian cancer remains one of the leading causes of cancer-related deaths, largely because it is often diagnosed at an advanced stage. Although histopathological examination is considered the gold standard for diagnosis, it is not suitable for providing immediate results during surgery. Consequently, intraoperative diagnostic techniques, including imprint cytology and frozen section analysis, are employed to assist surgeons in making timely clinical decisions.

Objective: To assess the sensitivity and diagnostic accuracy of intraoperative imprint cytology and frozen section for detecting malignant ovarian tumors, using histopathological examination as the gold standard.

Methods: This study was a diagnostic test with a cross-sectional design using secondary data from the Anatomical Pathology Laboratory of Dr. Soeradji Tirtonegoro General Hospital, Klaten, from August 2025 to May 2026. A total of 61 ovarian tumor cases were included, consisting of 27 benign and 34 malignant cases (including borderline tumors classified as malignant). Data were analyzed using 2×2 crosstabs to determine sensitivity, specificity, positive predictive value, negative predictive value, and accuracy.

Results: Imprint cytology showed a sensitivity of 91.18%, specificity of 100% and accuracy of 95.08%. Frozen section showed a sensitivity of 97.06%, specificity of 100% and accuracy of 98.36%.

Conclusion: Frozen section demonstrates higher accuracy and sensitivity than imprint cytology. However, imprint cytology also shows high diagnostic performance, with accuracy and sensitivity exceeding 80%, making it a useful screening modality, particularly in settings where frozen section facilities are unavailable or when technical limitations prevent its use.

Keywords: Imprint cytology, Frozen section, ovarian tumor, diagnostic test, accuracy