

## Short Communication

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# Can cell block be an aid to the reporting system of cervical cytology?: A screening tool for cervical cancer

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### Abstract

The conventional Papanicolaou (PAP) smear remains the first line of investigation for screening cervical cancer. Now a days shift has been there from the conventional smear to liquid based cytology and the upcoming idea is of adding a cell block were there is a need of cell block like atypical squamous cells, atypical glandular cells. Sometimes a times cells morphology can be confusing on the conventional smears but liquid based cytology and cell blocks can aid in the diagnosing. Cell blocks are frequently used in pleural, ascitic fluid cytology but with limited use in cervical cytology.

**Keywords:** Cervical cytology; PAP smears; Liquid based cytology

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### Introduction

Cervical smear or the common PAP test has been used for cervical screening in since 1940s. The sample is collected preferably from the transformation zone fixed with alcohol and sent to labs with a sensitivity is 30%, to 87% while the liquid based cytology was introduced in 1990s with higher sensitivity and specificity. Cell blocks can also used for putting specific IHCs and aid in cell morphology [1,2].

### Methodology

Data was searched from pubmed and few articles were found on cell block being used for cervical cytology.

### Results

Cell block preparation provides us with histologic sections where morphology and IHCs can be performed like p16/ki67, p53/WT1 for high grade serous carcinomas or metastatic carcinoma.

### Discussion

On how ‘the evaluation and utility of Cell Block Use Cervical Specimens’ can cell block along with Liquid based

cytology (LBC) assist in diagnosis of premalignant lesions of cervical cancer, situations where adequacy, origin of cell, squamous lesions, glandular lesions or in any case of diagnostic dilemma where cell block may aid in the diagnosis and recategorizing the cervical lesions into a higher category or stand with diagnosis given on LBC [1]. The use of LBC cell block in the Thin prep liquid based cervical specimen and cell block in the screening and recategorization various of cervical lesions which can aid in the Bethesda system of reporting cervical cytology. Cell blocks are widely used for pleural, peritoneal, lymph node cytology but it is recently that cell blocks have been added to the investigation list which needs more research and valuable information and the authors have aptly presented in the study [2,3]. The strength lies in clearly describing the utility of cell block and LBC by the number of cases being transferred to either a higher category or by aiding in the given diagnosis. Abnormalities in the endocervical cells can also reported better in LBC and cell block. In addition use of immunohistochemistry on the LBC slides can detection rates of HSIL and other precancerous lesions [2]. Ways on how to determine cellularity in a background of intense inflammation but may be one of the criteria which could be kept for diagnosis of any precancerous or malignant lesions was dense inflammation and histopathological of at least few case could have given more input in the present study [3,4].

## Conclusion

Cell block can be used for cell morphology, IHCs for identifying various lesion in pap cytology and can aid diagnosis of various cervical lesion and used in day to day practice.

## References

1. Kituncharoen S, Tantbirojn P, Niruthisard S. Comparison of Unsatisfactory Rates and Detection of Abnormal Cervical Cytology Between Conventional Papanicolaou Smear and Liquid-Based Cytology (Sure Path®). *Asian Pac J Cancer Prev.* 2016; 16: 8491-8494. PubMed: <https://pubmed.ncbi.nlm.nih.gov/26745107/>
2. Ekaterina K, Irakli K, Elene K, Ana M, Mariam A. A Comparative Study of Conventional Pap Smear and Liquid-Based Cytology. *Health Sci Rep.* 2025; 8: e70768. PubMed: <https://pmc.ncbi.nlm.nih.gov/articles/PMC12018278/>
3. Sakamoto H, Takenaka M, Ushimaru K, Tanaka T. Use of Liquid-Based Cytology (LBC) and Cell Blocks from Cell Remnants for Cytologic, Immunohistochemical, and Immunocytochemical Diagnosis of Malignancy. *Open J Pathology.* 2012; 2: 58-65.
4. Akca Y, Uzun E, Erkilic S. Comprehensive Evaluation of the Utility of Cell Block Use in ThinPrep Liquid-Based Cervical Specimens. *Turk Patoloji Derg.* 2025; 1. PubMed: <https://pubmed.ncbi.nlm.nih.gov/40396967/>