

# **Evaluation of Adequacy and Diagnostic Histopathology Results of Endometrial Specimens Obtained by Endometrial Aspiration Procedure in Srinagarind Hospital, Khon Kaen University.**

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## **ABSTRACT**

**Objective:** The purpose of this investigation is to evaluate the adequacy of endometrial specimens obtained by endometrial aspiration procedures using Pipelle® Endometrial Suction Curette, to determine the minimum microscopic area of endometrial fragments adequate for diagnosis, and to make a correlation between the initial diagnoses of the endometrium up through final evaluation of the curettage and hysterectomy specimen.

**Methods:** Archival glass slides from 262 cases of endometrial specimens were double-blind reviewed by an expert gynecologic pathologist for histologic diagnoses and specimen adequacy. All “Adequate” cases had the microscopic area of the largest fragment of endometrial tissue measured, using digital imaging software. All cases were correlated against their initial review diagnoses along with any following diagnoses up to hysterectomy specimen if available.

**Results:** Age range of samples was for patients ranging from 25-80 years old. Specimens fell in “Adequate” category comprised 87.8% (95% CI [1.0822, 1.1620]). The minimum area of endometrial tissue fragment possible for diagnosis was  $4.54 \times 10^4 \mu^2$  (mean =  $6.57 \times 10^6 \mu^2$ ). Most samples (76.3%) had only a single endometrial aspiration specimen submitted without a following endometrial-related specimen. Therefore, further diagnosis correlations were possible for only 44 of the 262 cases (16.8%). Of these 44 cases, concordant diagnoses were found in 11 cases (25%) with malignant conditions in 2 out of 4 cases (50%). Discordant diagnoses were detected in 33 cases and were found to be benign conditions due to hormonal changes; none of these diagnoses were changed from benign to malignant.

**Conclusion:** Endometrial aspiration procedure using Pipelle® Endometrial Suction Curette is still an effective and economic office procedure which provides adequate tissue for diagnosing both benign and malignant conditions.

**Keywords:** Pipelle® Endometrial Suction Curette, Endometrium