

Clinical evaluation of Li Brush endometrial samplers for diagnosing endometrial lesions in women with intrauterine devices

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Abstract

Objective: To investigate the feasibility and diagnostic accuracy of endometrial biopsy using Li Brush sampler in IUD users. **Design:** Clinical research **Setting:** A public teaching hospital in China. **Population:** IUD users with irregular uterine bleeding and IUD non-users who arranged for dilatation and curettage at the First Affiliated Hospital of Xi'an Jiaotong University, China from January 2018 to January 2020. **Methods:** This study was conducted in two parts. Part I was to assess the impact of Li Brush on the position of IUDs. Transvaginal ultrasound was used to locate IUDs before and after sampling. Part II was to explore the diagnostic accuracy of Li Brush in detecting endometrial lesions. Both IUD users and non-users were recruited, and the sampling satisfaction and accuracy of Li Brush were evaluated. **Main outcome Measures:** The positions of IUDs before and after sampling, cytopathological and histopathological diagnosis, sampling satisfaction rate. **Results:** Seventeen cases in part I confirmed no significant difference in the position of IUDs before and after sampling ($p=0.20$). 112 IUD users and 139 IUD non-users were recruited in part II. The Li Brush achieved 94.64% and 92.09% sampling satisfaction in the IUD group and control group, respectively, and the overall diagnostic accuracy was 88.04% and 93.33% in the two groups. **Conclusions:** Li Brush used for endometrial biopsy did not affect the position of IUDs and had high sampling satisfaction and accuracy for endometrial diagnoses.

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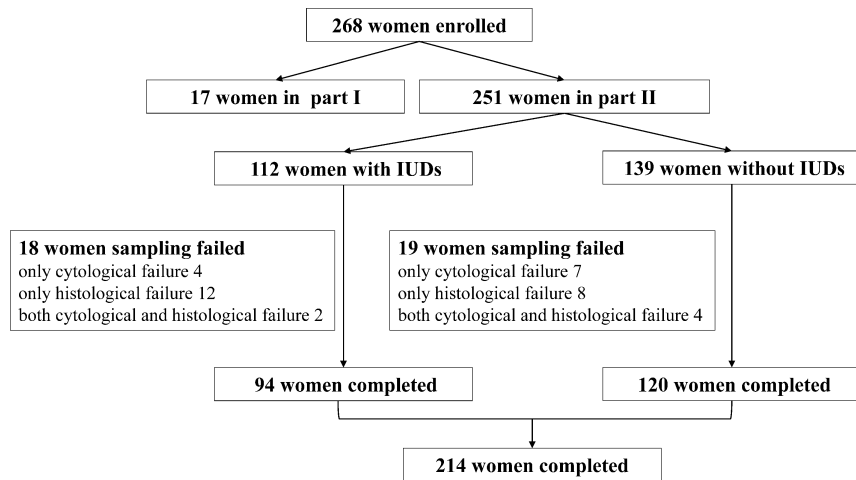


Figure 1. Han, et al.

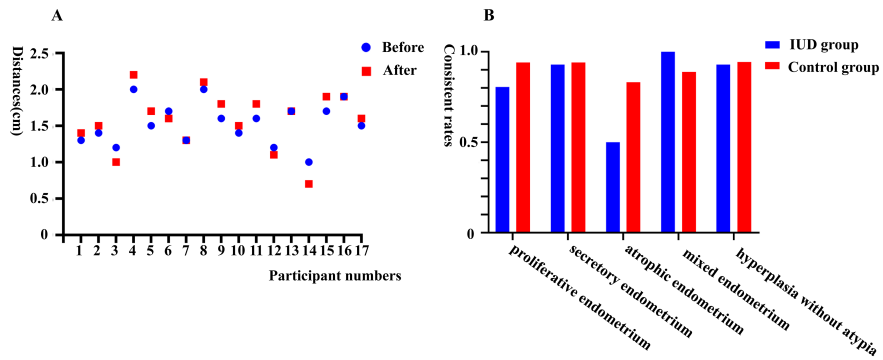


Figure 2. Han, et al.