

## Design and Development of Motorized Placer for Balloon Uterine Stents in Gynecology

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**Abstract :** This study aims to provide an automated method for placing the balloon uterine stents after hysteroscopy adhesiolysis. Currently, there are no automatized tools to place the balloon uterine stent; therefore, surgeons into the endometrial cavity manually fit it. However, it is very hard to pass the balloon stent through the cervical canal, which is roughly 10mm after the surgery. Our method aims to provide an effective and practical way of placing the stent, by automating the procedure through our designed device. Furthermore, our device does the required tasks fast compared to traditional methods, reduces the narcosis time, and decreases the bacterial contamination risks.

**Keywords :** balloon uterine stent, endometrial cavity, hysteroscopy, motorized-tool

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