The ARC Procedure - an innovative non touch technique to obtain an endometrial biopsy at the time of vaginoscopy avoiding the use of a speculum.

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#### Abstract

We have described how to perform blind endometrial sampling at the time of outpatient vaginoscopy without the use of a speculum in a true no touch technique.

The ARC Procedure - an innovative non touch technique to obtain an endometrial biopsy at the time of vaginoscopy avoiding the use of a speculum.

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# Introduction

'No touch' vaginoscopy should be the standard technique for outpatient hysteroscopy, especially where successful insertion of a vaginal speculum is anticipated to be difficult and where blind endometrial biopsy is not required (1).

Using this 'no touch' approach and not using a speculum is considered to partly reduce the uncomfortable or painful aspect of the procedure.

However, traditionally at the end of the vaginoscopy and removal of the scope, a speculum is passed to allow the passage of an endometrial sampling device under direct visualisation through the external os and blindly into the uterine cavity (2). This activity would appear to be at odds with the claims to a 'no touch' procedure.

Some operators have avoided the use of a speculum by passing a H-pipelle (50 cms long 3.1 mm diameter) through the hysteroscopic sheath (after removal of the diagnostic scope) (3).

However, in contemporaneous outpatient clinical practice, most diagnostic scopes in keeping with current guidelines would not be able to accommodate the 3 mm or wider biopsy instruments (1).

Our paper describes the methodology of avoiding the passage of a speculum but at the same time completing a blind endometrial sampling with an Endosampler (4) at the time of 'no touch' vaginoscopic investigation for abnormal uterine bleeding - the Alternative Retrieval of Cells (ARC).

#### Methods

The procedures were performed in the University Hospitals Birmingham on the Good Hope and Heartlands sites

The vaginoscopy, hysteroscopy and endometrial sampling procedures were explained as per protocol. The use of a 'no touch' Endosampler technique without a speculum was further explained.

3 patients requested to have the vaginoscopy and endometrial sampling without a speculum due to prior adverse experiences or personal choice.

The diagnostic vaginoscopic procedure was undertaken in the traditional manner and completed uneventfully to the point of scope withdrawal.

The tip of the diagnostic scope was withdrawn through the external cervical os. The tip of the scope was then maintained in the distended vaginal vault, maintaining the external cervical os and ectocervix in the field of view.

An Endosampler (3mm diameter, 240 mm length) was then introduced into the vagina and under direct visualisation of the diagnostic scope, the curved distal end of the sampler tube (image 1) was passed through the external os and henceforth into the uterine cavity.

With the Endosampler now in the uterine cavity, the scope was removed from the vagina. The scope and Endosampler were not within the endocervical or uterine cavity simultaneously.

A blind endometrial biopsy was obtained in the traditional manner after the uterine cavity was emptied of any remaining saline through the attached syringe.

## Results

This variation of practice without the use of a speculum was performed upon 3 patients following a diagnostic vaginoscopy.

All three patients were accepting of the procedure and all endometrial samples were adequate for histological reporting.

## Conclusion

This technique, the ARC Procedure, merits further examination as an ending to a truly 'no touch' vaginoscopy approach for blind endometrial biopsy using existing readily available products.

### References

Royal College of Obstetricians and Gynaecologists. Best Practice in Outpatient Hysteroscopy, Green Top Guideline No.59:London: RCOG; 2011

Madari S, Al-Shabibi N, Papalampros P, Papadimitriou A, Magos A.

A randomised trial comparing the H Pipelle with the standard Pipelle for endometrial sampling at 'no-touch' (vaginoscopic) hysteroscopy. BJOG. 2009 Jan;116(1):32-7. doi: 10.1111/j.1471-0528.2008.01992.x.

M. Chester, J., & Clark, T. (2020). Hysteroscopy Techniques and Treatment Settings. In M. Connor & T. Clark (Eds.), *Diagnostic and Operative Hysteroscopy* (pp. 57-71). Cambridge: Cambridge University Press. doi:10.1017/9781316276020.005

Soeters R, Whittaker J, Dehaeck K.

Endometrial sampling: a comparison between the Pipelle endometrial sampler and the Endosampler.

SAJGO 2011; 3(1): 34-38



Image 1. Endosampler showing the curved and measured tip of the instrument.