

Welsh Obstetrics and Gynaecology Society

(11th October 2019)

Setting up Ambulatory Care in Gynaecology

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Declaration of Interest

T Justin Clark MB ChB, MD (Hons) FRCOG

I have had affiliations with the following medical companies:

Bayer^{1,2}, Conceptus^{1,2}, Ethicon (Gynecare)^{1,2}, FemCare-NikoMed¹, Hologic^{1,2,3}, Nordic Pharma¹, Olympus¹, Smith & Nephew / Medtronic^{1,2,3}, LiNA Medical^{2,3}

1. Honoraria for training, speaking and / or advice
2. Travel and / or accommodation
3. Research Grants

See also:

http://www.bjog.org/view/0/EdDisclOfInt.html#Justin_Clark

Setting up Ambulatory Care in Gynaecology

DEFINING AMBULATORY CARE

Outpatient / Ambulatory hysteroscopy services should aim to:

- Utilise a 'One-stop' 'See & Treat' approach
 - Avoid multiple patient visits through seamless consultation, testing, treatment and / or planning of clinical management
 - Reduce hospital admissions (or even attendance at hospital)
- Streamline models of care, including provision of appropriately skilled staff and necessary resources and health technologies avoiding unnecessary bureaucracy and delays
 - Minimise the need to use expensive operating theatre facilities
- Implement the latest evidence-based practices in a timely fashion
- Respond to the needs of patients and offer patient choice
- Prioritise the patient experience, especially the management of pain and anxiety

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DEVELOPMENT & RATIONALE FOR AMBULATORY CARE

Rationale

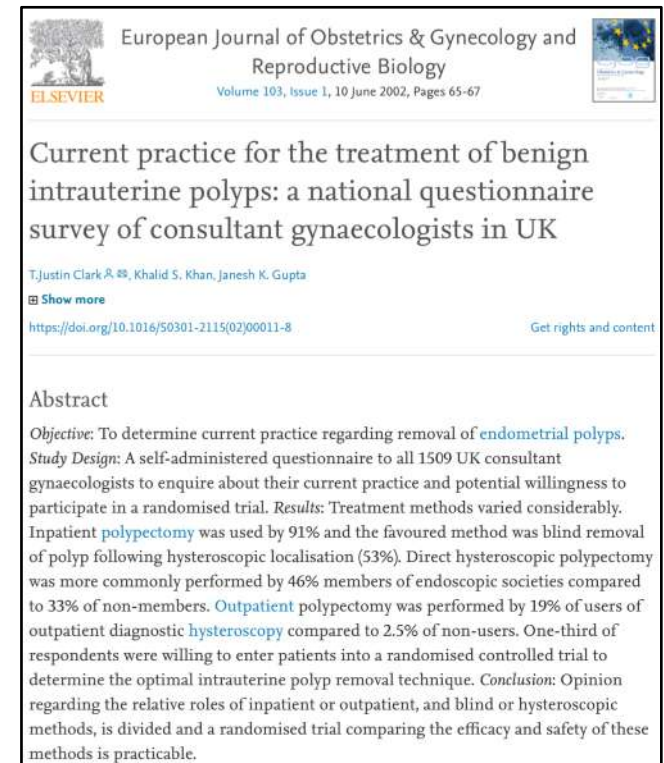
- Provision of equivalent or superior care (diagnosis and/or treatment)
 - Better outcomes
 - Safety (e.g. infection), convenience, acceptability, effectiveness
- Streamlined care avoiding multiple visits and / or expensive operating theatre occupation
 - Efficiency – cost effectiveness but NOT simply cheaper care

Factors driving development

- Patient expectations
 - Immediacy
- Clinicians with an interest
 - Protocols / evidence base
- Technological advances
 - Outpatient diagnosis
 - Miniaturisation (optics / instrumentation); portability
- (Politics)
 - Policy

Paradigm shift

- Few ambulatory units at the end of the last century
- 2001 - <30% of hospitals had dedicated Outpatient Hysteroscopy Units
 - <20% of these performed operative procedures (polypectomy)
- 2019 - Outpatient Hysteroscopy Units now ubiquitous (hospital or community settings)
 - Majority offer diagnosis and therapy



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BUSINESS CASE

Business case

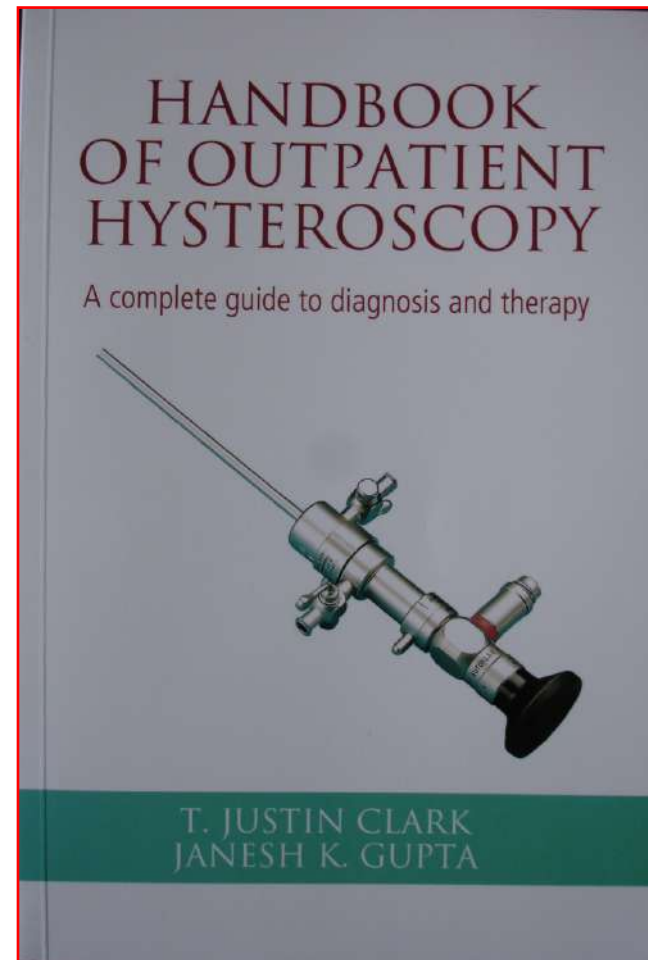
- Get correct local form if one exists in your hospital
 - Templates available
- Demonstrate potential benefits of new services to decision makers
 - Clinical
 - Efficiency
- Involve relevant managers – follow up regularly – often have to go to the top
- Patient support

How can we set up services?:

- Chapter 2 – Business Plans

Business plan outline

1. Executive Summary
2. Background
3. Description of new intervention
4. Benefits summary
5. Business case
 - 5.1 Diagnosis / treatment model
 - 5.2 Tabulated unit costs & resource utilisation
 - 5.3 Comparison with standard / current practice
 - 5.4 System set up & cost
- 5.5 Training requirements
6. Comments/Discussion



Business case

- Get correct local form if one exists in your hospital
 - Templates available
- Demonstrate potential benefits of new services to decision makers
 - Clinical
 - Efficiency
- Involve relevant managers – follow up regularly – often have to go to the top
- Patient support

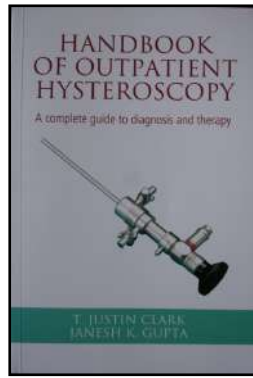
How can we set up / expand services?: Overcoming obstacles

- Rationale
 - Demonstrate potential benefits of new services to decision makers
- Formulate a business case
 - **Audit of current practice is key to this**

Example (Birmingham Women's Hospital 2000)

Procedure	Number (year)	Duration (average)	% possible in OP setting	Number transferred to OP setting (projected)	Number of 'new' OP hysteroscopy clinics needed (projection based upon 6 per clinic)	Number of operating lists released (half day sessions – projection based upon 6 cases per list)
Diagnostic hysteroscopy/D&C	650	30 mins	90%	580	100	100
Uterine polypectomy	120	30 mins	80%	110	20	20
Retrieval of 'lost' IUCDs	20	30 mins	90%	15	3	3
Insertion of Mirena IUCS	100	30 mins	90%	90	15	15
Endometrial ablation	140	30 mins	50%	70	12	12
Laparoscopic sterilisation	360	30 mins	50%	180	30	30
TOTAL	1400	-	-	1000	180	180

Business plans - viability



- Estimate costs of setting up a comprehensive hysteroscopy service
 - Infrastructure
 - Equipment
 - Training
- Estimate costs of running the service
 - Infrastructure and maintenance
 - Disposables
 - Decontamination
 - Salaries*
 - Main cost driver
- Estimate income
 - Coding
 - Get help from middle management – it's their job!

How can we set up services?:

- Remember you are running a SERVICE for patients. Efficiency is paramount BUT making money is not the primary objective.
 - Some interventions may lose money, some may 'break even' and others bring in revenue.
 - Aim for a cost neutral service as a minimum to maintain the viability of the service
- Keep patient outcomes and standards of clinical care at the forefront of any discussions with management
 - Satisfaction (regular audit)
 - Throughput (ongoing audit / data)
 - Safety (audit)
 - Outcomes (audit / research / implement published guidance pertaining to best practice)
 - Marketing (PCTs, GPs etc.)

Change in philosophy

The historical standard:

“ Is this patient suitable for outpatient surgery?”

should be replaced by

“Is there any justification for performing this case under general anaesthesia +/- a requirement for full operating facilities?”

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AMBULATORY SERVICES

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HYSTEROSCOPY

How to perform outpatient operative hysteroscopy successfully

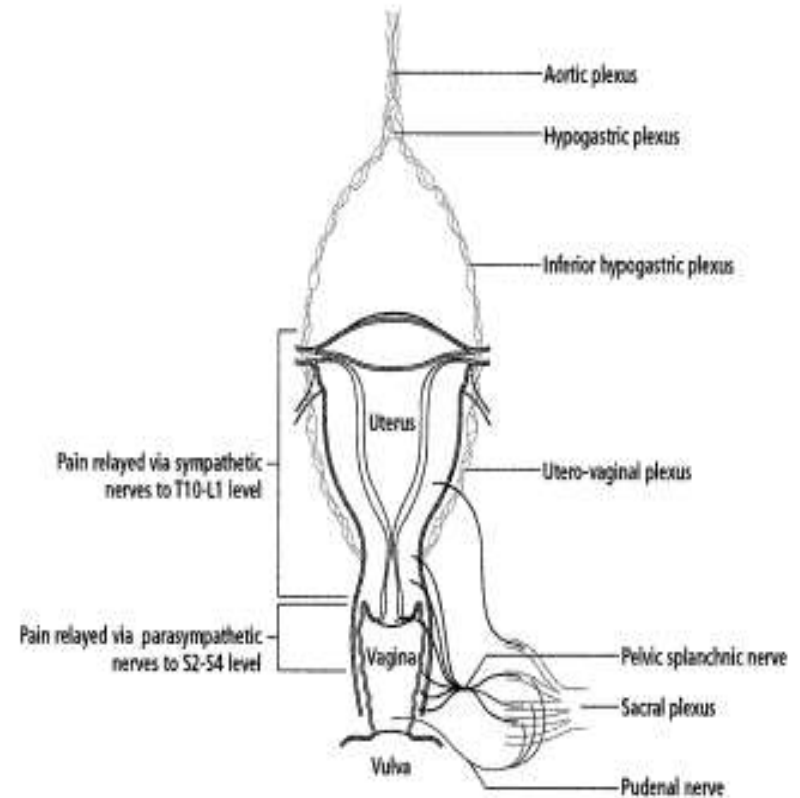
- Best practice
 - BSGE/RCOG guideline
 - Combating pain and anxiety
- Equipment
 - Endoscopes
 - Mechanical instruments
 - Tissue removal systems
- Technique

How to perform outpatient operative hysteroscopy successfully

- Best practice
 - BSGE/RCOG guideline
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Combating pain and anxiety: Options

- Successful implementation of an outpatient interventional service requires effective attenuation of anxiety and pain.
- This can only be accomplished if the operator appreciates relevant:
 - Psychological factors
 - Physical factors
 - Uterine neuro-anatomy
 - Action and role of pharmacological agents
 - Analgesics
 - Anaesthetics
 - Sedatives
 - Importance of the team and bedside man
 - 'VOCAL – LOCAL'
 - Gentle, expeditious approach



Local anaesthesia for pain control during outpatient hysteroscopy: systematic review and meta-analysis

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doi:10.1136/bmj.c1130

ABSTRACT

Objective To compare the effects of different types of local anaesthetic for pain control during outpatient hysteroscopy.

Design Systematic review and meta-analysis of randomised controlled trials.

Setting Outpatient hysteroscopy clinics.

Participants Women undergoing diagnostic or operative hysteroscopy as outpatients—that is, without general anaesthesia.

Study selection criteria Medline, Embase, CINAHL, the Cochrane library, and reference lists of relevant studies. Two reviewers independently selected trials. Data were abstracted on quality, characteristics, and results.

Results There were 20 trials (2851 participants). Data from 15 of these were meta-analysed in subgroups defined by type of intervention and study quality. Intracervical (standardised mean difference -0.36 , 95% confidence interval -0.61 to -0.10 , $I^2=0\%$) and paracervical (-1.28 , -2.22 to -0.35 , $I^2=97\%$) injections of local anaesthetic significantly reduced the pain in women undergoing hysteroscopy as outpatients, whereas transcervical (-0.11 , -0.31 to 0.10 , $I^2=27\%$) and topical application (-0.32 , -0.97 to 0.33 , $I^2=90\%$) did not. Meta-regression showed that paracervical injection was superior to the other anaesthetic methods ($P=0.04$), a finding that was supported by the high quality subgroup of studies. Use of local anaesthetic did not have a significant effect on the incidence of vasovagal episodes ($P=0.09$).

Conclusions Paracervical local anaesthetic injection is the best method of pain control for women undergoing hysteroscopy as outpatients.

interventions in various obstetric and gynaecological procedures,⁴ there is no comprehensive review evaluating comparative effectiveness of the whole range of local anaesthetic methods for specific procedures.

We conducted a systematic review to determine the effects of various local anaesthetic techniques used for pain control during outpatient hysteroscopy.

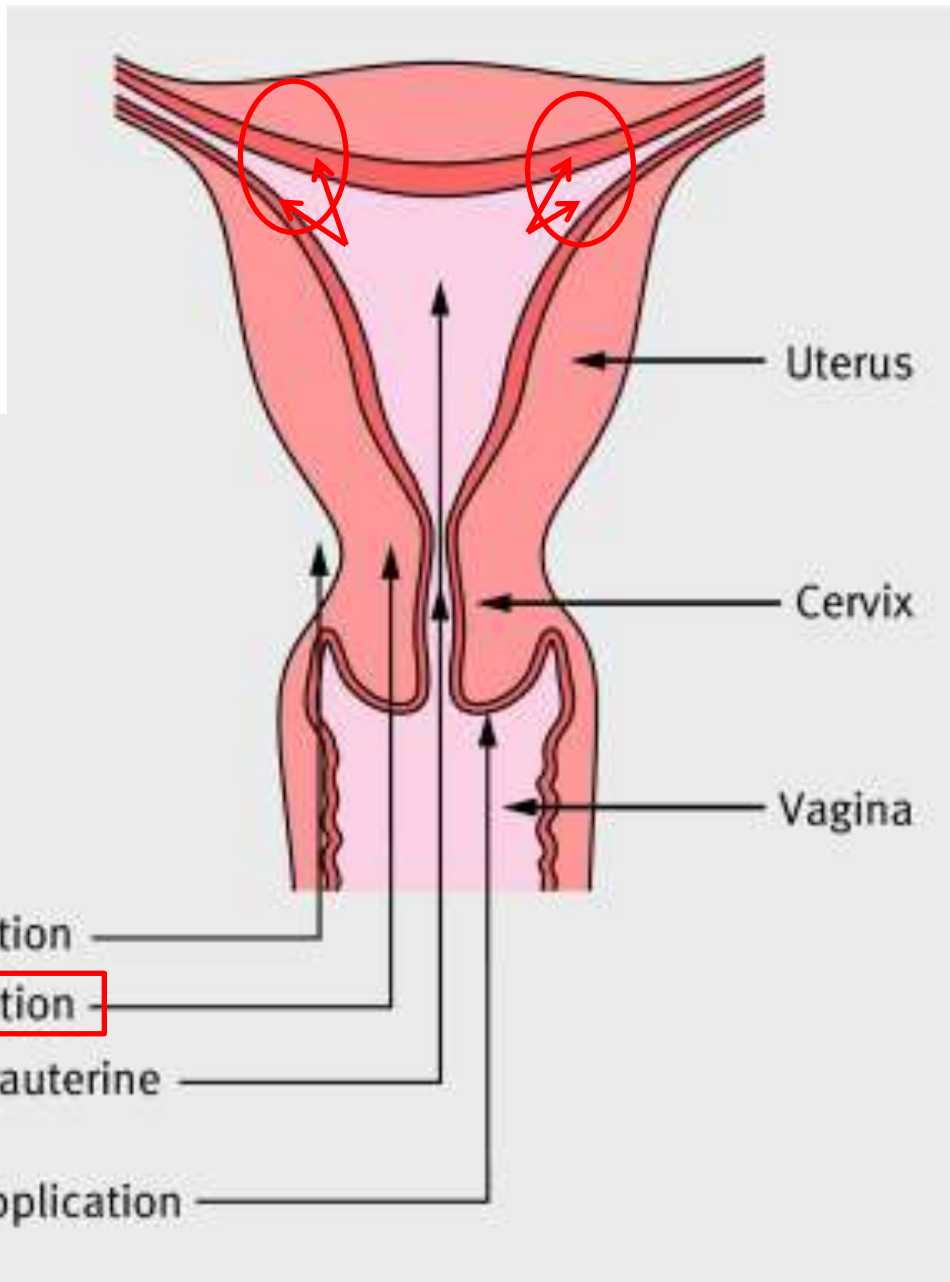
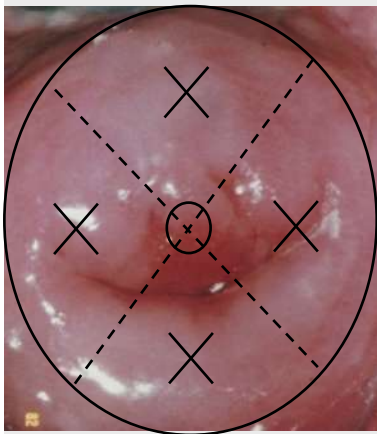
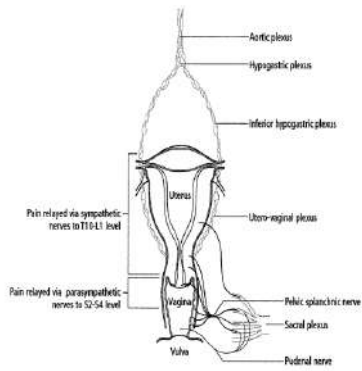
METHODS

We conducted the review prospectively, devising a protocol based on widely documented methods.^{5,6}

Data sources and searches

We conducted a comprehensive literature search to identify studies that evaluated the use of local anaesthetic to reduce pain during outpatient hysteroscopy. The databases searched included Medline (from 1950 to September 2008), Embase (from 1980 to September 2008), CINAHL (from 1981 to September 2008), and the Cochrane library. We used a combination of the keywords “hysteroscopy,” “vaginocopy,” “local anaesthetic,” and their associated medical subject headings (MeSH) to search Medline, Embase, and CINAHL. The Cochrane library was searched with the keywords “hysteroscopy and “anaesthetic.” To ensure maximum sensitivity we placed no limits or filters on the searches. We also checked the reference sections of selected original articles for relevant papers and retrieved any that we thought were relevant but had not been retrieved by the database searches.

Study selection



Best practice guidelines for outpatient hysteroscopy

<p>Green-top Guideline No. 59 March 2011</p> <p>Best Practice in Outpatient Hysteroscopy</p> <p>RCOG/BSGE Joint</p>	<p>Best Practice in Outpatient Hysteroscopy</p> <p>This is the first edition of this guideline.</p> <p>Executive summary of recommendations</p> <p>Service provision</p> <p>All gynaecology units should provide a dedicated management of women with a view to the economic benefits associated with outpatient hysteroscopy.</p> <p>Outpatient hysteroscopy should be performed in an appropriately sized, well equipped, private changing facilities.</p> <p>Outpatient hysteroscopy should be performed in a well equipped treatment room. This should be a purpose facility.</p> <p>The healthcare professional should be trained in outpatient hysteroscopy.</p> <p>There should be a nurse chaperone present.</p> <p>Written patient information should be provided for the procedure should be taken home.</p> <p>Analgesia</p> <p>Routine use of oral analgesia should be avoided as it may cause adverse effects.</p> <p>Women without contraindications should be given doses of non-steroidal anti-inflammatory drugs before scheduled outpatient hysteroscopy to reduce the immediate postoperative period.</p> <p>Cervical preparation</p> <p>Routine cervical preparation should be avoided in the absence of any evidence of infection or uterine trauma.</p> <p>Type of hysteroscope</p> <p>Miniature hysteroscopes (2.7 mm) should be used for diagnostic outpatient hysteroscopy wherever possible by the woman.</p>	<p>There is insufficient evidence to recommend 12°, 25° or 30° off-set lens hysteroscopes should be left to the discretion of the operator.</p> <p>Flexible hysteroscopes compared with rigid hysteroscopes, fewer failed procedures, there is insufficient evidence to recommend hysteroscopes for diagnostic purposes should be left to the discretion of the operator.</p> <p>Distension medium</p> <p>For routine outpatient hysteroscopy carbon dioxide and normal saline are neither superior in reducing pain nor does either appear to reduce the incidence of complications.</p> <p>Uterine distension with carbon dioxide for outpatient diagnostic hysteroscopy is preferred to normal saline to act as a distension medium.</p> <p>Local anaesthesia and cervical dilatation</p> <p>Blind cervical dilatation for hysteroscopy is unnecessary in the absence of pain, vasovagal reactions or uterine trauma.</p> <p>Cervical dilatation generally should be avoided. Standard protocols regarding the use of anaesthesia should be followed to prevent rare but potent complications.</p> <p>Instillation of local anaesthetic should be avoided in diagnostic outpatient hysteroscopy.</p> <p>Topical application of local anaesthetic should be avoided in the absence of evidence of infection or uterine trauma.</p> <p>Application of local anaesthetic should be avoided in the absence of evidence of infection or uterine trauma.</p>	<p>Miniaturisation of hysteroscopes and increasing use of the vaginoscopic technique may diminish any advantage of intracervical or paracervical anaesthesia. Routine administration of intracervical or paracervical local anaesthetic should be used where larger diameter hysteroscopes are being employed (outer diameter greater than 5mm) and where the need for cervical dilatation is anticipated (e.g. cervical stenosis). <input checked="" type="checkbox"/></p> <p>Routine administration of intracervical or paracervical local anaesthetic is not indicated to reduce the incidence of vasovagal reactions. A</p> <p>Conscious sedation</p> <p>Conscious sedation should not be routinely used in outpatient hysteroscopic procedures as it confers no advantage in terms of pain control and the woman's satisfaction over local anaesthesia. A</p> <p>Life-threatening complications can result from the use of conscious sedation. Appropriate monitoring and staff skills are mandatory if procedures are to be undertaken using conscious sedation. <input checked="" type="checkbox"/></p> <p>Vaginoscopy</p> <p>Vaginoscopy reduces pain during diagnostic rigid outpatient hysteroscopy. A</p> <p>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. <input checked="" type="checkbox"/></p>
	<p>RCOG Green-top Guideline No. 59</p>	<p>RCOG Green-top Guideline No. 59</p>	<p>RCOG Green-top Guideline No. 59</p> <p>4 of 22</p> <p>© Royal College of Obstetricians and Gynaecologists</p>

Best practice: Key points

Ambulatory hysteroscopy

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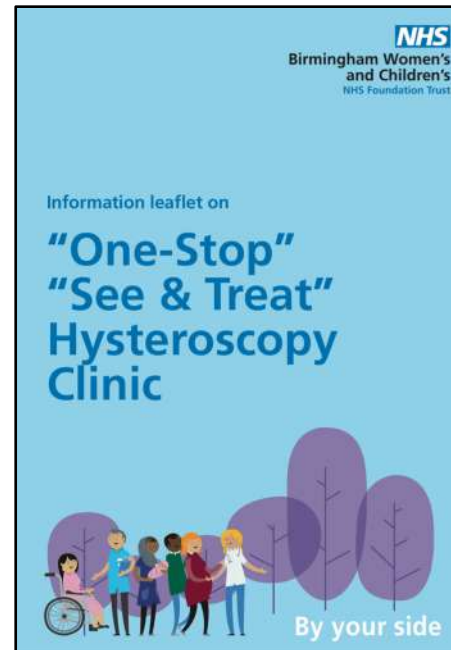
Box 1. Summary of recommendations for best practice in outpatient hysteroscopy

1. All gynaecology units should provide a dedicated outpatient hysteroscopy service which is appropriately sized, equipped and staffed and located outside of the formal operating theatre setting. The healthcare professional(s) should have the necessary skills and expertise to carry out diagnostic and/or therapeutic outpatient hysteroscopy.
2. Written patient information should be provided before the appointment and consent for the procedure should be taken.
3. Women without contraindications should be advised to consider taking standard doses of NSAIDs 1 hour before their appointment, but routine use of opiate analgesia should be avoided.
4. Routine cervical preparation before outpatient hysteroscopy should not be used unless dilatation beyond Hegar 6 is anticipated.
5. Miniature hysteroscopic systems (≤ 4 mm outer diameter) should be used for diagnostic outpatient hysteroscopy. Choice of hysteroscope (e.g. flexible or rigid; 0° or fore-oblique distal lenses) should be left to the discretion of the operator.
6. Carbon dioxide or normal saline can be used as distension media for diagnostic outpatient hysteroscopy, but normal saline should be used for operative procedures.
7. Routine, blind cervical dilatation should be avoided.
8. Topical application of local anaesthetic to the ectocervix should be considered where a cervical tenaculum is necessary. Routine administration of intracervical or paracervical local anaesthetic should be used where larger diameter hysteroscopes are being employed (outer diameter >5 mm) and where the need for cervical dilatation is anticipated (e.g. cervical stenosis). Standard protocols regarding the type, maximum dosage and route of administration of anaesthesia should be implemented.
9. Conscious sedation should not be routinely used in outpatient hysteroscopic procedures.
10. Vaginoscopy (avoiding the use of a vaginal speculum or cervical instrumentation) should be the standard technique for outpatient hysteroscopy.

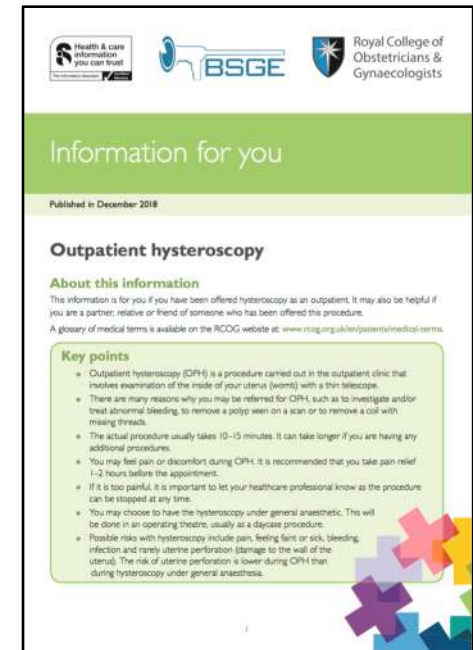
Source: RCOG/BSGE 'Green-top guideline' [<http://www.rcog.org.uk/files/rcog-corp/GTG59Hysteroscopy.pdf>]

Patient preferences

- Counselling
 - Patient information



- Timing
 - Backed up with verbal information
- LISTEN TO YOUR PATIENT!



Hysteroscopic skills:

Assessment of the vagina, cervix, cervical canal & uterine cavity

- Vaginoscopy

- Minimises patient discomfort by avoiding vaginal distension (antiseptic swabs or vaginal speculae) and cervical instrumentation (tenaculums / vulsellums)

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www.bjog.org

Systematic review

Vaginoscopic approach to outpatient hysteroscopy: a systematic review of the effect on pain

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Accepted 21 December 2009.

Background Vaginoscopy, also known as the 'no-touch' technique, is an alternative method for performing hysteroscopy without the need for a vaginal speculum to view the cervix or cervical instrumentation to grasp and steady the cervix.

Objective To examine the effect of a vaginoscopic approach to outpatient hysteroscopy on the patients' experience of pain, compared with a traditional approach using a vaginal speculum.

Search strategy MEDLINE, EMBASE, CINAHL and the Cochrane Library were searched for relevant articles. No filters or restrictions were placed on the searches.

Selection criteria Randomised controlled trials (RCTs) that assess pain when comparing the vaginoscopic technique versus a traditional hysteroscopy in the outpatient setting.

Data collection and analysis Two reviewers independently selected trials. Data were abstracted on quality, characteristics and results.

Meta-analysis were performed using the random-effects model to calculate the standardised mean difference (SMD).

Main results There were six trials (2851 participants). Data from four of these were meta-analysed, and we found that the use of the vaginoscopic approach to hysteroscopy was less painful than using the traditional technique (SMD -0.44, 95% CI from -0.65 to -0.22, $I^2 = 58\%$). There was no significant difference in the number of failed procedures between groups ($P = 0.38$).

Author's conclusions The vaginoscopic approach to outpatient hysteroscopy is successful and significantly reduces the pain experienced by patients during the procedure, compared with traditional techniques using a vaginal speculum. Vaginoscopy should become standard practice for endoscopic instrumentation of the uterine cavity in the outpatient setting.

Keywords Hysteroscopy, no-touch, vaginoscopy.



Vaginostopy: Evidence

BJOG An International Journal of Obstetrics and Gynaecology

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 www.bjog.org

Vaginostopy Against Standard Treatment: a randomised controlled trial

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Objective To evaluate whether vaginostopy or standard hysteroscopy was more successful in the outpatient setting.

Design Randomised controlled multicentre trial.

Setting Outpatient hysteroscopy clinics at two UK hospitals.

Population 1597 women aged 16 or older undergoing an outpatient hysteroscopy.

Methods Women were allocated to vaginostopy or standard hysteroscopy using third party randomisation stratified by menopausal status with no blinding of participants or clinicians.

Main outcome measures The primary outcome was 'success', a composite endpoint defined as: a complete procedure, no complications, a level of pain acceptable to the patient, and no sign of genitourinary tract infection 2 weeks after the procedure.

Results Vaginostopy was significantly more successful than standard hysteroscopy [647/726 (89%) versus 621/734 (85%), respectively; relative risk (RR) 1.05, 95% CI 1.01–1.10; $P = 0.01$]. The median time taken to complete vaginostopy was 2 minutes

compared with 3 minutes for standard hysteroscopy ($P < 0.001$). The mean pain score was 42.7 for vaginostopy, which was significantly less than standard hysteroscopy 46.4 ($P = 0.02$). Operative complications occurred in five women receiving vaginostopy and 19 women receiving standard hysteroscopy (RR 0.26, 95% CI 0.10–0.69).

Conclusions Vaginostopy is quicker to perform, less painful, and more successful than standard hysteroscopy and therefore should be considered the technique of choice for outpatient hysteroscopy.

Keywords Ambulatory hysteroscopy, hysteroscopy, office hysteroscopy, outpatient hysteroscopy, vaginostopy.

Tweetable abstract Vaginostopy is quicker to perform, less painful, and more successful than standard hysteroscopy.

Linked article This article is commented on by BS Hurst p. 900 in this issue. To view this mini commentary visit <https://doi.org/10.1111/1471-0528.15686>.

Please cite this paper as: Smith PP, Kolhe S, O'Connor S, Clark TJ. Vaginostopy Against Standard Treatment: a randomised controlled trial. BJOG

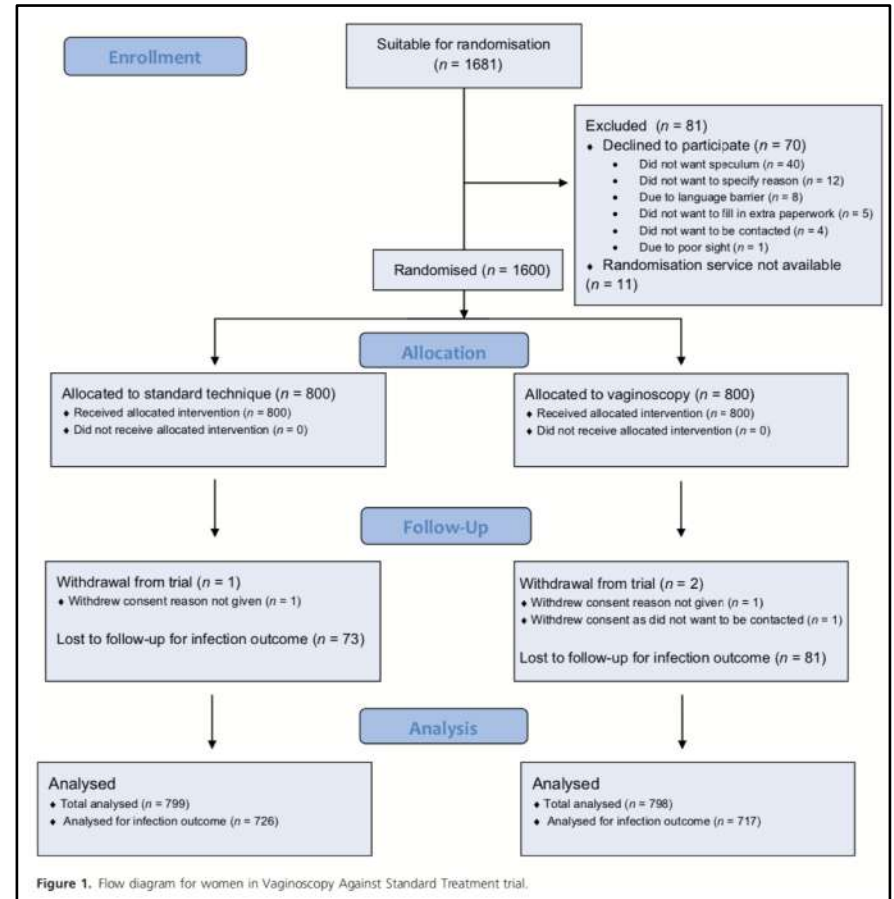


Figure 1. Flow diagram for women in Vaginostopy Against Standard Treatment trial.

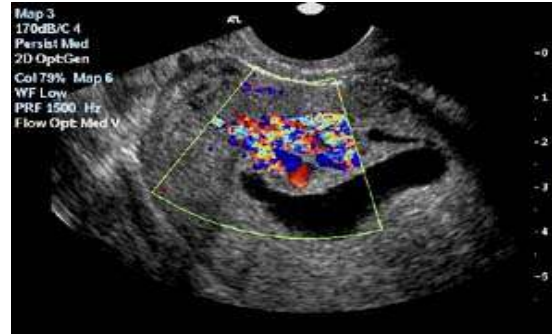
How to perform outpatient operative hysteroscopy successfully

- Best practice
 - BSGE/RCOG guideline
 - Combating pain and anxiety
- Equipment
 - Endoscopes
 - Mechanical instruments
 - Tissue removal systems
- Technique

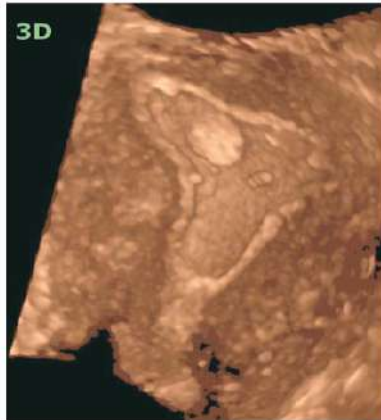
Setting up ambulatory care in gynaecology

Why has ambulatory gynaecology developed?:

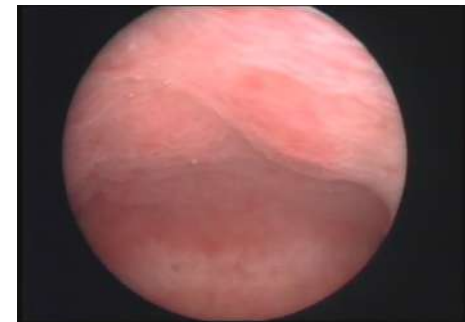
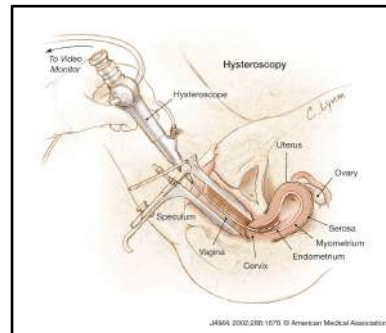
Improved minimally invasive diagnosis



Three-dimensional (3D) gel instillation sonohysterography (GIS) reconstruction of an endometrial polyp.



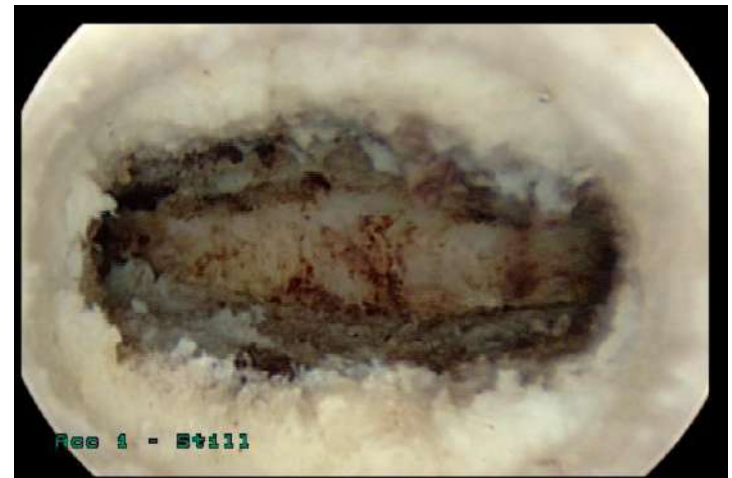
Eoslo. Gel instillation sonohysterography. Fertil Steril 2007.



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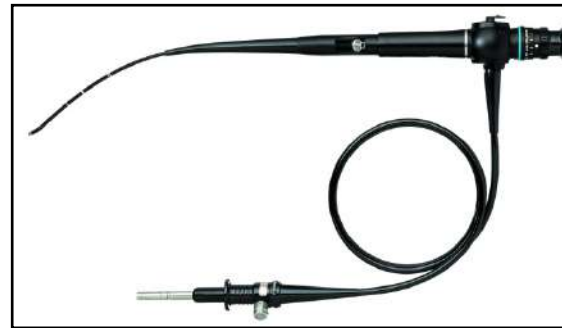
Why has ambulatory gynaecology developed?:

Emphasis on conservative interventions



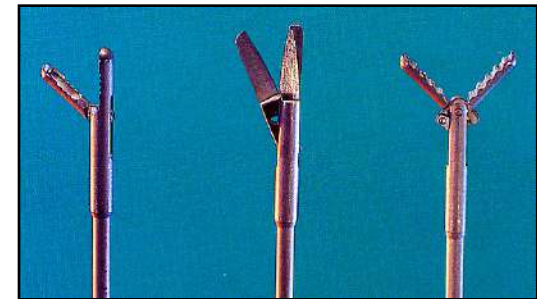
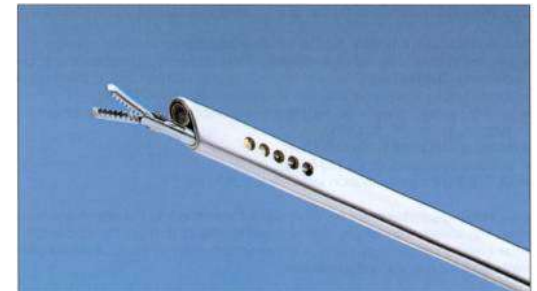
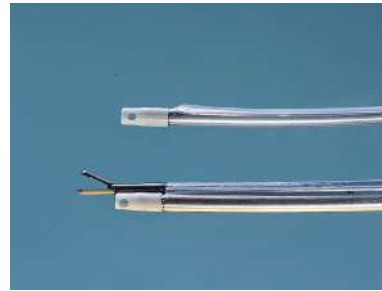
Equipment: Hysteroscopes

- Diameter
- Length
- Optics
- Compatibility
- Rigid vs. flexible
- 0° vs. offset lens (12°,30°)
- Diagnostic
 - Single flow
- Operative
 - Continuous flow
 - Bespoke endoscopes (TRS)
- Disposable vs. reusable
- Fixed vs. portable



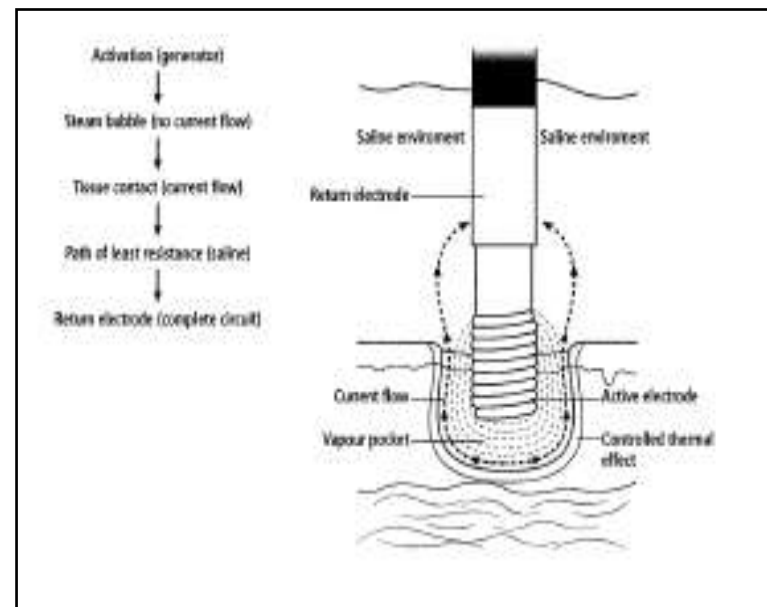
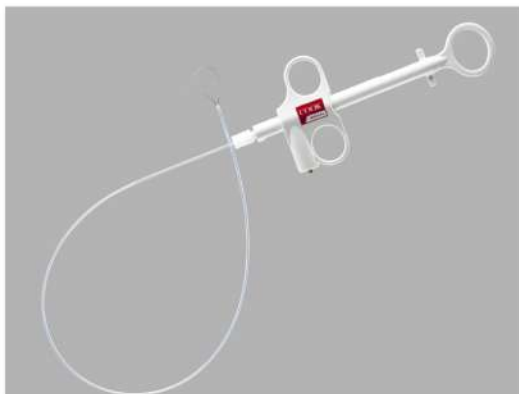
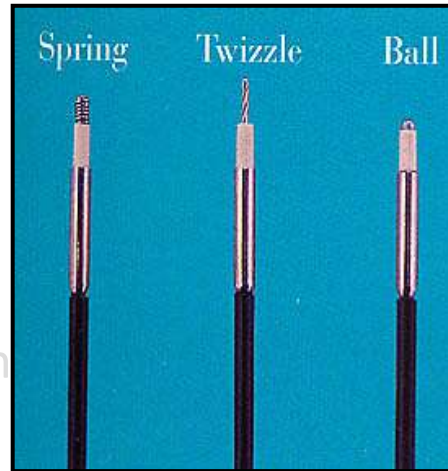
Equipment: Ancillary instruments

- Mechanical
 - Grasping forceps
 - Biopsy forceps
 - Scissors
 - Myoma fixation instruments
 - Aspiration cannulae



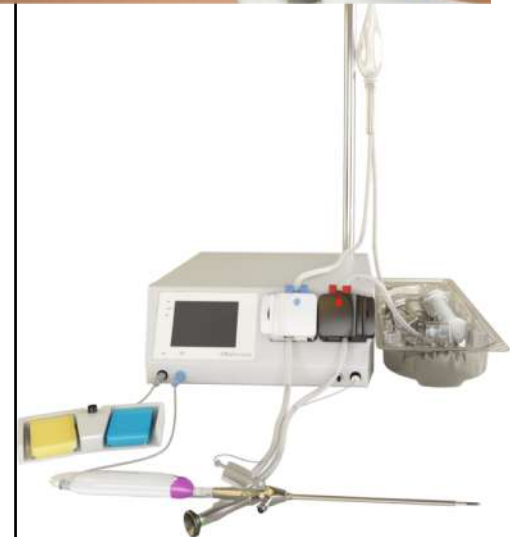
Ancillary instruments

- Mechanical
 - Grasping forceps
 - Biopsy forceps
 - Scissors
 - Myoma fixation instrument
 - Aspiration cannulae
- Electrical instruments
 - Needle electrode
 - Retraction loop ('snare')



Outpatient surgical management of intrauterine pathology

Tissue removal systems



Understanding Fluid Management

- Relevant for fibroid resection
- See Guidelines - BSGE / ESGE; AAGL
 - Awareness of monopolar (non-electrolyte media) vs. bipolar electrical circuits (isotonic) distension media requirements
 - Fluid monitoring
 - Fluid thresholds (2500ml isotonic; 1000ml hypotonic)
 - Fluid monitoring
 - Managing fluid overload (hypo-osmolar, hyponatraemia)

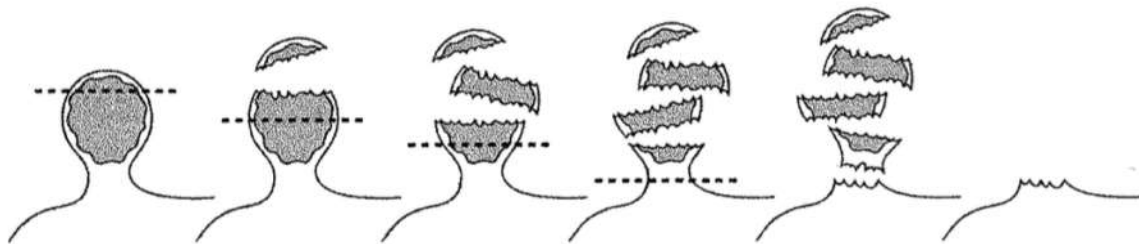
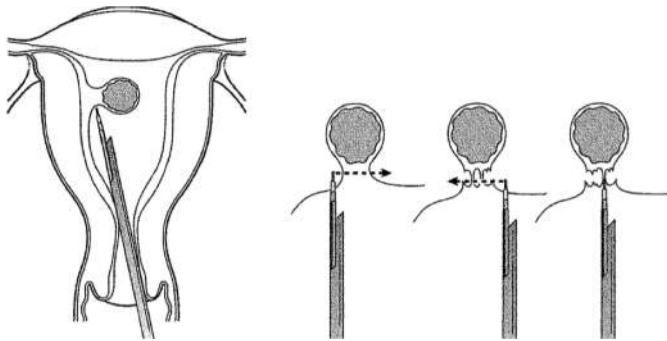


Portable hysteroscopy.....

- Illumination
 - Portable LED light source
- Imaging
 - Mobile phone

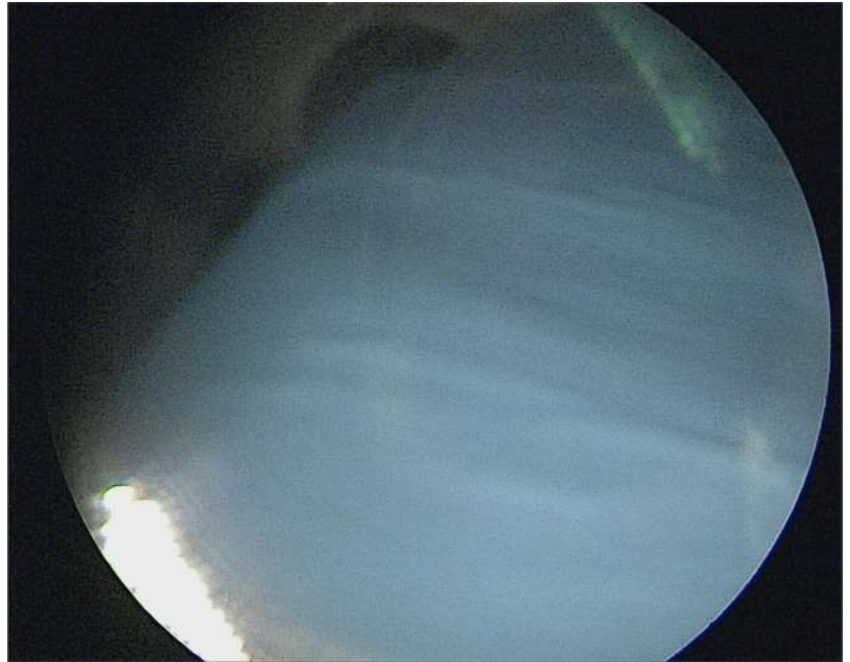
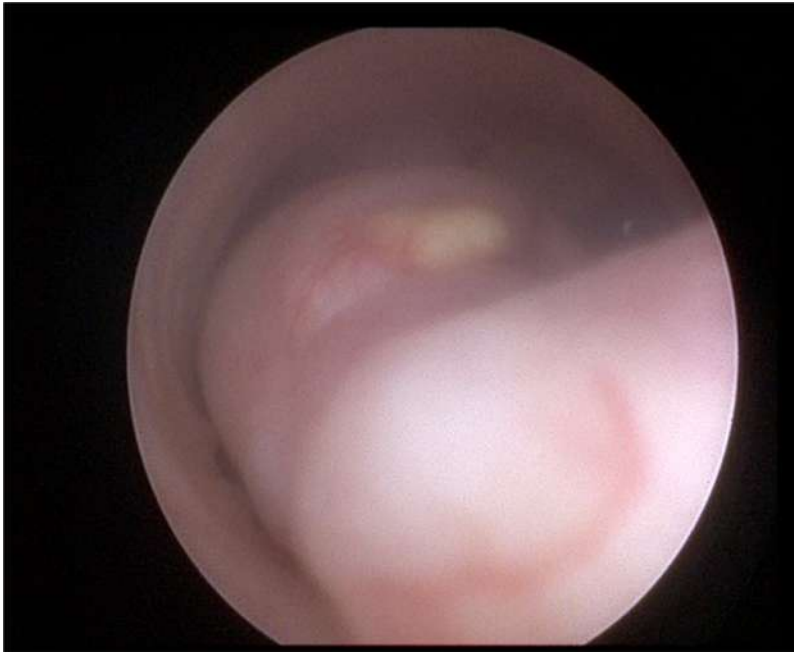


Technique: Operative – polypectomy (miniature bipolar electrocautery)

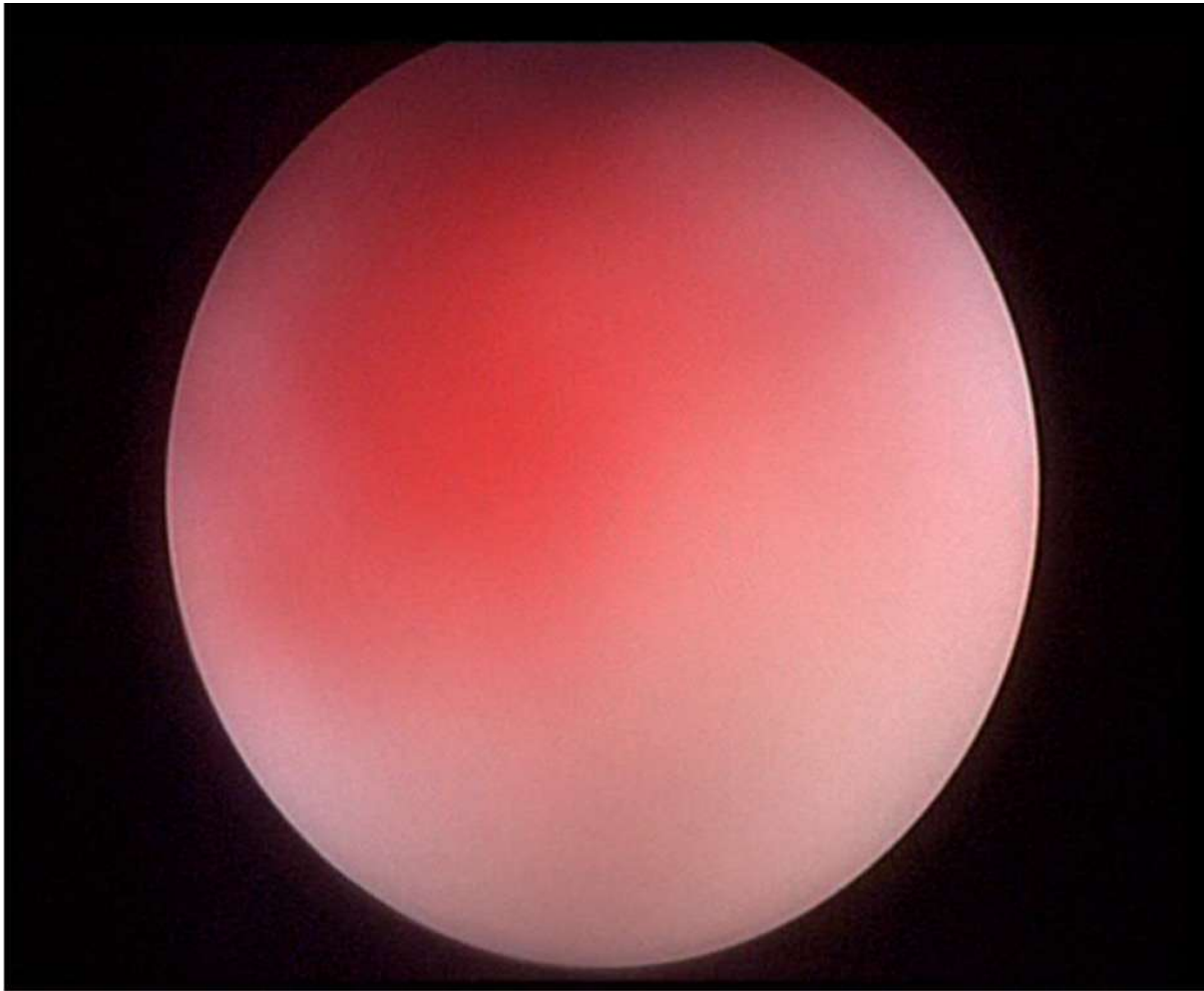


Specific hysteroscopic skills:

Polypectomy –tissue removal system advantages vs. electrical resection






Technique: Operative – myomectomy– Tissue Removal Systems – TRUCLEAR mini-ultra (5mm!)



Versapoint + Tissue removal systems

(Grade 1/2 submucous fibroids)



ELSEVIER

VIDEO ARTICLE

Hysteroscopic Myomectomy of FIGO Type 2 Leiomyomas Under Local Anesthesia: Bipolar Radiofrequency Needle-Based Release Followed By Electromechanical Morcellation

Malcolm G. Munro, MD, FACOG, FRCS(c)^{*}

From the Department of Obstetrics and Gynecology, David Geffen School of Medicine at UCLA/Kaiser Permanente Medical Center, Los Angeles, CA.

Hysteroscopic Myomectomy of FIGO Type 2 Leiomyomas Under Local Anesthesia: Bipolar radiofrequency needle-based release followed by electromechanical morcellation

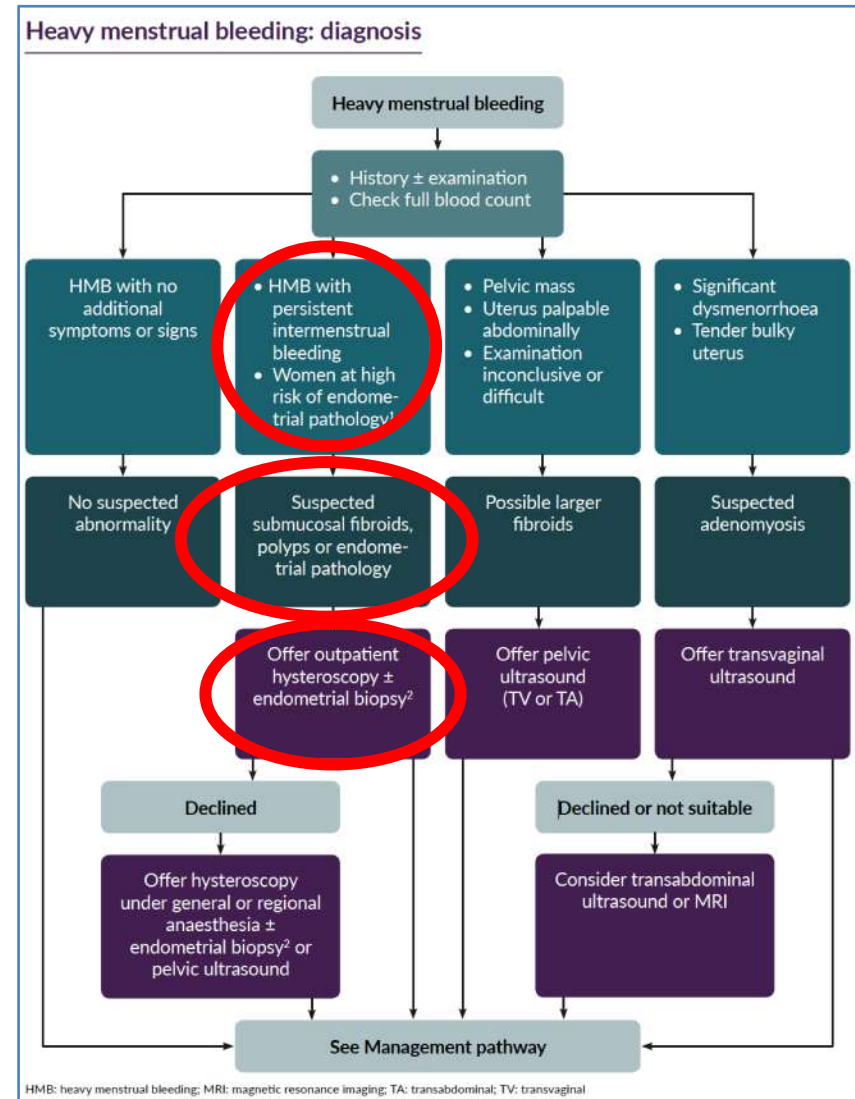
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David Geffen School of Medicine at UCLA
Kaiser Permanente, Los Angeles Medical Center

Setting up Ambulatory Care in Gynaecology

HYSTEROSCOPY - ABNORMAL UTERINE BLEEDING & REPRODUCTION

Indication: Abnormal uterine bleeding

- Heavy menstrual bleeding – refer to NICE guideline update 2018



Evidence: Outpatient treatment of Polyps

RESEARCH

OPEN ACCESS



Outpatient versus inpatient uterine polyp treatment for abnormal uterine bleeding: randomised controlled non-inferiority study

Natalie A M Cooper,^{1,2} Justin Clark,³ Lee Middleton,² Lavanya Diwakar,⁴ Paul Smith,^{3,5} Elaine Denny,⁶ Tracy Roberts,⁴ Lynda Stobert,⁷ Susan Jowett,⁴ Jane Daniels,² on behalf of the OPT trial collaborative group

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Additional material is published online only. To view please visit the journal online (<http://dx.doi.org/10.1136/bmj.h1398>)

Cite this as: *BMJ* 2015;350:h1398 [doi:10.1136/bmj.h1398](https://doi.org/10.1136/bmj.h1398)

Accepted: 5 February 2015

ABSTRACT

OBJECTIVE

To compare the effectiveness and acceptability of outpatient polypectomy with inpatient polypectomy.

DESIGN

Pragmatic multicentre randomised controlled non-inferiority study.

SETTING

Outpatient hysteroscopy clinics in 31 UK National Health Service hospitals.

PARTICIPANTS

507 women who attended as outpatients for diagnostic hysteroscopy because of abnormal uterine bleeding and were found to have uterine polyps.

INTERVENTIONS

Participants were randomly assigned to either outpatient uterine polypectomy under local anaesthetic or inpatient uterine polypectomy under general anaesthesia. Data were collected on women's self reported bleeding symptoms at baseline and at 6, 12, and 24 months. Data were also collected on pain and acceptability of the procedure at the time of polypectomy.

MAIN OUTCOME MEASURES

The primary outcome was successful treatment, determined by the women's assessment of bleeding at six months, with a prespecified non-inferiority margin of 25%. Secondary outcomes included generic (EQ-5D) and disease specific (menorrhagia multi-attribute scale) quality of life, and feasibility and acceptability of the procedure.

RESULTS

73% (166/228) of women in the outpatient group and 80% (168/211) in the inpatient group reported successful treatment at six months (intention to treat relative risk 0.91, 95% confidence interval 0.82 to 1.02; per protocol

relative risk 0.92, 0.82 to 1.02). Failure to remove polyps was higher (19% v 7%; relative risk 2.5, 1.5 to 4.1) and acceptability of the procedure was lower (83% v 92%; 0.90, 0.84 to 0.97) in the outpatient group. Quality of life did not differ significantly between the groups. Four uterine perforations, one of which necessitated bowel resection, all occurred in the inpatient group.

CONCLUSIONS

Outpatient polypectomy was non-inferior to inpatient polypectomy. Failure to remove a uterine polyp was, however, more likely with outpatient polypectomy and acceptability of the procedure was slightly lower.

TRIAL REGISTRATION

International Clinical Trials Registry 65868569.

Introduction

Abnormal uterine bleeding affects women of all ages and is the commonest gynaecological reason for referral to secondary care.^{1,2} Uterine polyps are focal outgrowths of the endometrium and are often found in association with uterine bleeding in both premenopausal and postmenopausal women.^{3,4} Such polyps are detected in an estimated 20–40% of women with abnormal uterine bleeding^{5–7} following outpatient investigation with pelvic ultrasonography or hysteroscopy. The available evidence supports the current practice of surgically removing uterine polyps to help alleviate the symptoms of bleeding.^{8,9} Conventional practice is to undertake this procedure under general anaesthesia in hospital. However, with advances in endoscopic technology it is now possible to perform uterine polypectomy under hysteroscopic guidance in an outpatient setting without the need for hospital admission and anaesthesia.^{10–12} Furthermore, treatment can be carried out at the same time as diagnosis; the “see and treat” approach.¹³

The convenience and immediacy of outpatient treat

Intention to treat

Six months

One years

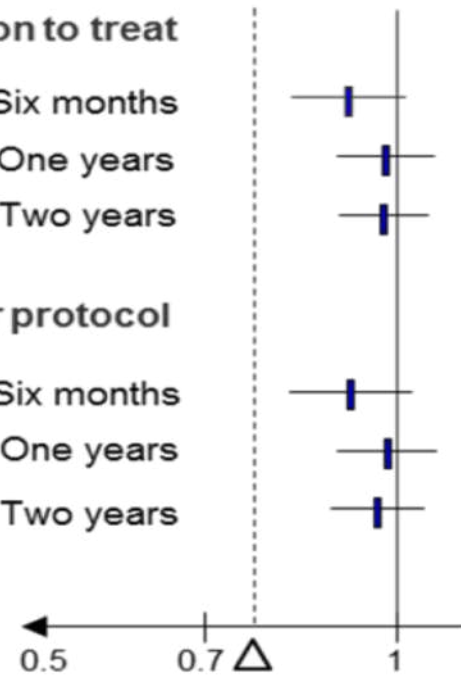
Two years

Per protocol

Six months

One years

Two years



△ = margin of non-inferiority (0.75)

Relative risks (RR) with 95% confidence intervals shown

Direction of arrow favours inpatient polypectomy

Hysteroscopic Morcellation Compared With Electrical Resection of Endometrial Polyps

A Randomized Controlled Trial

Paul P. Smith, MChB (Hons), Lee J. Middleton, MSc, Mary Connor, MD, and T. Justin Clark, MD (Hons)

OBJECTIVE: To evaluate whether hysteroscopic morcellation or bipolar electrosurgical resection is more favorable for removing endometrial polyps in an office setting in terms of feasibility, speed, pain, and acceptability.

METHODS: A multicenter, single-blind, randomized, controlled trial of office hysteroscopic morcellation compared with electrosurgical resection was conducted. A total of 121 women were randomly allocated to polyp removal by one of the two methods in an office setting. The outcomes assessed were time taken to complete the endometrial polypectomy, defined as the time from insertion to removal of vaginal instrumentation, completeness of polyp removal, acceptability, and pain measured on a 100-mm visual analog scale.

RESULTS: The median time taken to complete the procedure was 5 minutes and 28 seconds for morcellation compared with 10 minutes and 12 seconds for electrosurgical resection ($P<.001$). The polyps were completely removed in 61 out of 62 (98%) women assigned to morcellation compared with 49 out of 59 (83%) women treated with electrosurgical resection (odds ratio 12.5; 95% confidence interval [CI] 1.5–100.6; $P=.02$). The mean pain scores during the procedure favored morcellation by 16.1 points on average (35.9 compared with 52.0; 95%

CI for difference, -24.7 to -7.6 ; $P<.001$). Overall, 99% of women found office polypectomy to be acceptable, with only one woman in the electrosurgical resection group considering the procedure unacceptable.

CONCLUSIONS: In comparison to electrosurgical resection during hysteroscopic polypectomy, morcellation was significantly quicker, less painful, more acceptable to women, and more likely to completely remove endometrial polyps compared with electrosurgical resection.

CLINICAL TRIAL REGISTRATION: ClinicalTrials.gov, www.clinicaltrials.gov, NCT01509313.

(*Obstet Gynecol* 2014;123:1–8)

DOI: 10.1097/AOG.0000000000000187

LEVEL OF EVIDENCE: I

The miniaturization of hysteroscopes and ancillary instrumentation along with enhanced visualization have enabled hysteroscopic surgery to be performed in an office setting without the need for general anesthesia or hospital admission.¹ The most common operative hysteroscopic procedure is endometrial polypectomy,² and the feasibility of such approaches has been demonstrated.³ A disposable miniature bipolar electrosurgical system has been developed to be used

Outpatient endometrial ablation local anaesthetic protocols:

Box: Protocol for an outpatient 'office' endometrial ablation

Pre-operative

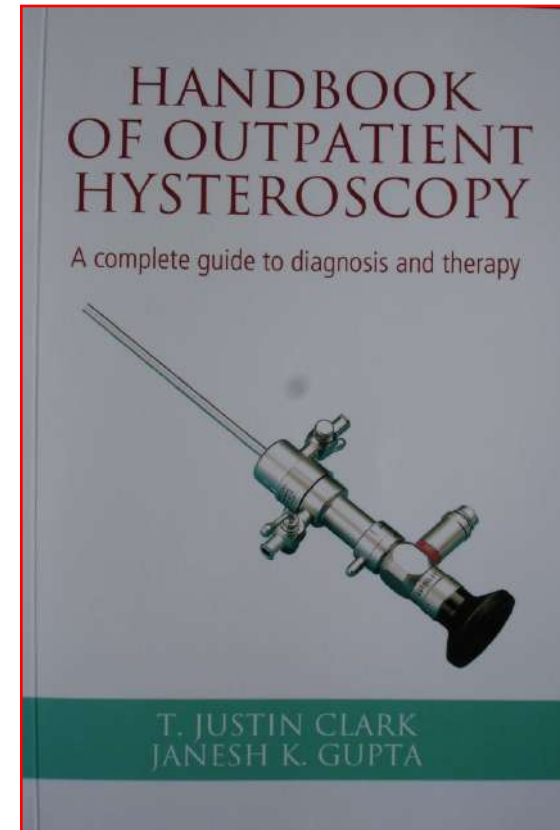
- Inform all women not to fast for the procedure thereby preventing hypoglycaemia, dehydration and propensity to vaso-vagal attacks
- Pre-medicate one hour prior to the procedure
- Simple analgesics - diclofenac 100mg rectal suppository + two co-dydramol tablets orally (if non-steroidal anti-inflammatory drugs are contra-indicated then alternatives e.g. oral opiate tramadol hydrochloride 100mg should be administered)
- Anti-emetic - ondansetron 4mg orally.
- [Notes: Antibiotics are not routinely indicated because the risk of uterine / pelvic infection is low (<1:200)]⁹.

Operative procedure

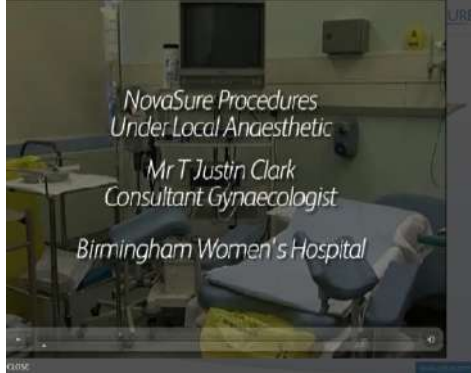
- Position in the dorso-lithotomy position and designate a nurse to stay with the patient throughout the procedure to offer support and distraction, providing a 'vocal-local'.
- Local anaesthesia - directly infiltrate the cervix such as three 2.2ml vials of the local anaesthetic Citanest (Astra, UK - prilocaine 0.9% + felypressin 0.03 units/ml) into four quadrants - the 3, 6, 9 and 12 o'clock positions. Inject the majority of local anaesthetic (1.5mls) at the deepest possible point in each quadrant, using a 35mm, 27G dental syringe, approximating the level of the internal cervical os, and the remainder distributed evenly throughout the length of the cervix on withdrawal.
- Perform a standard diagnostic hysteroscopy to exclude intrauterine pathology / anomalies distorting the uterine cavity contra-indicating the procedure and to ascertain likely compliance with the procedure.
- Perform the NovaSureTM or ThermachoiceTM procedure according to manufacturer's instructions (see below).
- [Notes: If patient cannot tolerate the procedure it should be abandoned. Intravenous sedation or narcotic analgesia is not to be prescribed. An endometrial biopsy is not needed as a normal endometrial sample should have been confirmed prior to trial recruitment]

Post-operative

- Return the woman to a designated recovery area, where she can lie supine or sit and recuperate (e.g. day-case ward).
- Administer further simple analgesia or strong opiate analgesia (e.g. 5-10mg of morphine) as required to alleviate post-operative pain according to severity.
- Discharge home after a minimum stay of two hours once they have tolerated oral diet, passed urine and have adequate pain control.
- Discharge with an information leaflet describing expected post-operative symptoms and instructions to take simple analgesics regularly for the first 24 hours (diclofenac 50mg three times daily and/or co-dydramol, two tablets four times daily).
- Arrange nurse telephone contact the following day to check on their progress.



DUB – endometrial ablation



Reproduction

- Reproductive failure
- Fertility control

Hysteroscopy and IVF

- No place for routine diagnostic hysteroscopy prior to IVF in the presence of a normal transvaginal ultrasound



Hysteroscopy in recurrent in-vitro fertilisation failure (TROPHY): a multicentre, randomised controlled trial

Tarek El-Touhly, Rudi Campo, Yacoub Khalaf, Carla Tabanelli, Luca Gianaroli, Sylvie S Gordts, Stephan Gordts, Greet Mestdagh, Tonka Mandesic, Jan Voboni, Gian L Marchino, Chiara Benedetto, Talha Al-Shawaf, Luca Sobotini, Paul T Seed, Marco Gergolet, Grigoris Grimbizis, Hoda Habib, Arri Coomarasamy

Summary

Background The success rate of in-vitro fertilisation (IVF) remains low and many women undergo multiple treatment cycles. A previous meta-analysis suggested hysteroscopy could improve outcomes in women who have had recurrent implantation failure; however, studies were of poor quality and a definitive randomised trial was needed. In the TROPHY trial we aimed to assess whether hysteroscopy improves the livebirth rate following IVF treatment in women with recurrent failure of implantation.

Methods We did a multicentre, randomised controlled trial in eight hospitals in the UK, Belgium, Italy, and the Czech Republic. We recruited women younger than 38 years who had normal ultrasound of the uterine cavity and history of two to four unsuccessful IVF cycles. We used an independent web-based trial management system to randomly assign (1:1) women to receive outpatient hysteroscopy (hysteroscopy group) or no hysteroscopy (control group) in the month before starting a treatment cycle of IVF (with or without intracytoplasmic sperm injection). A computer-based algorithm minimised for key prognostic variables: age, body-mass index, basal follicle-stimulating hormone concentration, and the number of previous failed IVF cycles. The order of group assignment was masked to the researchers at the time of recruitment and randomisation. Embryologists involved in the embryo transfer were masked to group allocation, but physicians doing the procedure knew of group assignment and had hysteroscopy findings accessible. Participants were not masked to their group assignment. The primary outcome was the livebirth rate (proportion of women who had a live baby beyond 24 weeks of gestation) in the intention-to-treat population. The trial was registered with the ISRCTN Registry. ISRCTN35859078.

Findings Between Jan 1, 2010, and Dec 31, 2013, we randomly assigned 350 women to the hysteroscopy group and 352 women to the control group. 102 (29%) of women in the hysteroscopy group had a livebirth after IVF compared with 102 (29%) women in the control group (risk ratio 1.0, 95% CI 0.79–1.25; p=0.96). No hysteroscopy-related adverse events were reported.

Interpretation Outpatient hysteroscopy before IVF in women with a normal ultrasound of the uterine cavity and a history of unsuccessful IVF treatment cycles does not improve the livebirth rate. Further research into the effectiveness of surgical correction of specific uterine cavity abnormalities before IVF is warranted.

Lancet 2016; 387: 2614–21
Published Online
April 22, 2016
[http://dx.doi.org/10.1016/S0140-6736\(16\)00258-0](http://dx.doi.org/10.1016/S0140-6736(16)00258-0)
See Comment page 2578
See Articles page 2622
Assisted Conception Unit, Guy's and St Thomas' Hospital NHS Foundation Trust, London, UK (T E-Touhly, MRCOG, Y Khalaf FRCOG); Ziekenhuis Oost Limburg, Assisted Conception Unit, Geel, Belgium (R Campo MD, G Mestdagh MD); SISMER, Assisted Conception Unit, Bologna, Italy (C Tabanelli MD, L Gianaroli MD); Leuven Institute for Fertility and Embryology, Tierserveert, Leuven, Belgium (S S Gordts MD, S Gordts MD); The Sanatorium Pronatal, Assisted Conception Unit, Prague, Czech Republic (T Mandesic MD, J Voboni MD); Obstetrics and Gynaecology Department, University of Turin, Turin, Italy (G Marchino MD); Centre for Reproductive Medicine, Barts Health NHS Trust, London, UK (P T Seed MD); Centre for Reproductive Medicine, Barts Health NHS Trust, London, UK (A Coomarasamy MD)



Hysteroscopy before in-vitro fertilisation (inSIGHT): a multicentre, randomised controlled trial

Janine G Smit, Jenneke C Kasius, Marinus J C Eijkemans, Carolien A M Koks, Ronald van Golde, Annemieke W Nap, Gabriëlle J Scheffer, Petra A P Manger, Annemieke Hoek, Benedictus C Schoot, Arne M van Heusden, Walter K H Kuchenbecker, Denise A M Perquin, Kathrin Fleischer, Eugenie M Kaaij, Alexander Sluijmer, Jaap Friederich, Ramon H M Dykgraaf, Marcel van Hooft, Leonie A Louwe, Janet Kwee, Corry H de Koning, Ineke C A H Janssen, Femke Mol, Ben W J Mol, Frank J M Broekmans, Helen L Torrance

Summary

Background Hysteroscopy is often done in infertile women starting in-vitro fertilisation (IVF) to improve their chance of having a baby. However, no data are available from randomised controlled trials to support this practice. We aimed to assess whether routine hysteroscopy before the first IVF treatment cycle increases the rate of livebirths.

Methods We did a pragmatic, multicentre, randomised controlled trial in seven university hospitals and 15 large general hospitals in the Netherlands. Women with a normal transvaginal ultrasound of the uterine cavity and no previous hysteroscopy who were scheduled for their first IVF treatment were randomly assigned (1:1) to either hysteroscopy with treatment of detected intracavitary abnormalities before starting IVF (hysteroscopy group) or immediate start of the IVF treatment (immediate IVF group). Randomisation was done with web-based concealed allocation and was stratified by centre with variable block sizes. Participants, doctors, and outcome assessors were not masked to the assigned group. The primary outcome was ongoing pregnancy (detection of a fetal heartbeat at >12 weeks of gestation) within 18 months of randomisation and resulting in livebirth. Analysis was by intention to treat. This trial is registered with ClinicalTrials.gov, number NCT01242852.

Findings Between May 25, 2011, and Aug 27, 2013, we randomly assigned 750 women to receive either hysteroscopy (n=373) or immediate IVF (n=377). 209 (57%) of 369 women eligible for assessment in the hysteroscopy group and 200 (54%) of 373 in the immediate IVF group had a livebirth from a pregnancy during the trial period (relative risk 1.06, 95% CI 0.93–1.20; p=0.41). One (<1%) woman in the hysteroscopy group developed endometritis after hysteroscopy.

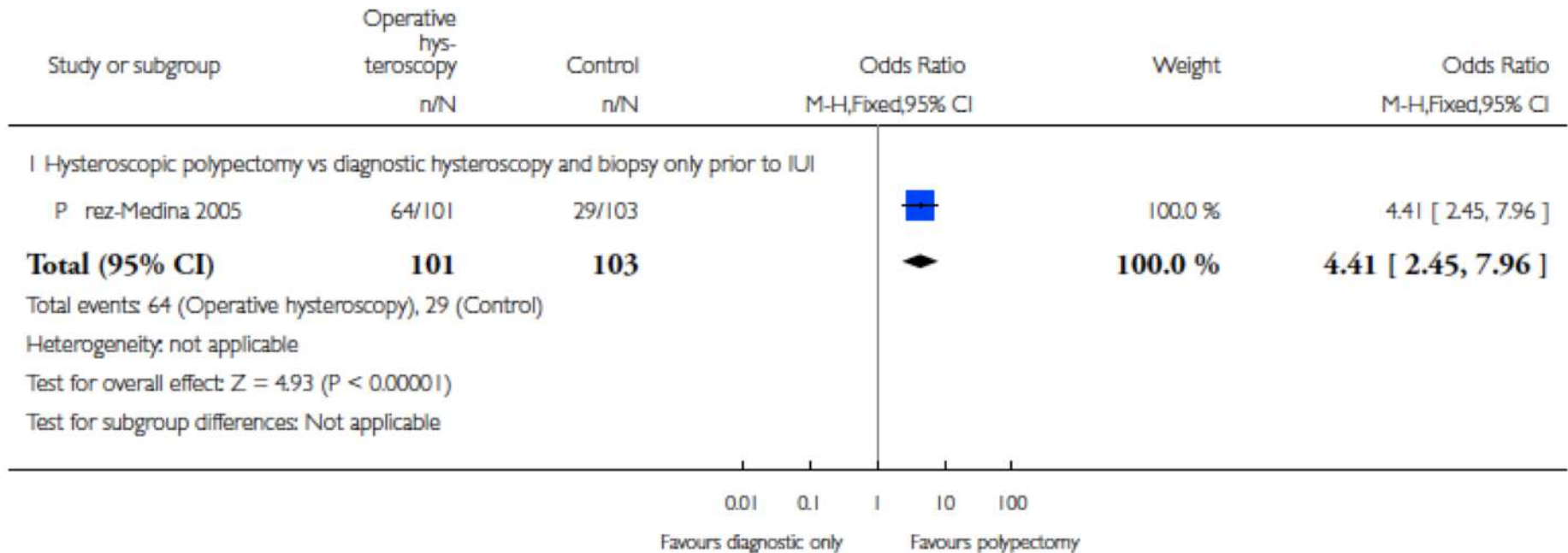
Interpretation Routine hysteroscopy does not improve livebirth rates in infertile women with a normal transvaginal ultrasound of the uterine cavity scheduled for a first IVF treatment. Women with a normal transvaginal ultrasound should not be offered routine hysteroscopy.

Lancet 2016; 387: 2622–29
Published Online
April 22, 2016
[http://dx.doi.org/10.1016/S0140-6736\(16\)00231-2](http://dx.doi.org/10.1016/S0140-6736(16)00231-2)
See Comment page 2578
See Articles page 2614
Department of Reproductive Medicine and Gynaecology (J G Smit MD, J C Kasius PhD, Prof F J M Broekmans PhD, H L Torrance PhD) and Julius Center for Health Sciences and Primary Care (Prof M J C Eijkemans PhD), University Medical Center, Utrecht, Netherlands; Maxima Medical Center, Veldhoven, Netherlands (CA M Koks PhD); Maastricht University Medical Center, Maastricht, Netherlands (R van Golde PhD); Rijnstate Hospital, Arnhem, Netherlands (A W Nap PhD); Gele Hospital Apeldoorn, Netherlands

Evidence for the surgical management of uterine polyps - Subfertility

- Uterine polyps are frequently found during the diagnostic work up of women with reproductive problems.
 - Estimates of polyp prevalence at hysteroscopy prior to IVF are imprecise ranging from between 6 to 32% 1-4
 - However, uterine polyps may be incidental findings as the background prevalence in a fertile population is not well established.
- Removal of polyps may enhance fertility
 - Most available data for polypectomy in subfertile patients suggests that removal may improve fertility, with reported spontaneous pregnancy rates varying between 43% to 80%
 - No RCTs have evaluated the effect of polypectomy on spontaneous pregnancy and IVF / ICSI clinical pregnancy rates
 - However, one RCT has evaluated the effect of hysteroscopic polypectomy on success of IUI
 - This demonstrated a benefit of hysteroscopic polypectomy on clinical pregnancy rate

Hysteroscopic polypectomy vs. diagnostic hysteroscopy and biopsy: Clinical Pregnancy



Evidence for the surgical management of submucous fibroids - Subfertility



Fibroids and infertility: an updated systematic review of the evidence

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^a Wisconsin Fertility Institute, Middleton, Wisconsin; and ^b Department of Obstetrics and Gynecology, University of California, Los Angeles, California

Objective: To investigate the effect of fibroids on fertility and of myomectomy in improving outcomes.

Design: Systematic literature review and meta-analysis of existing controlled studies.

Setting: Private center for Reproductive endocrinology and infertility.

Patient(s): Women with fibroids and infertility.

Intervention(s): A systematic literature review, raw data extraction and data analysis.

Main Outcome Measure(s): Clinical pregnancy rate, spontaneous abortion rate, ongoing pregnancy/live birth rate, implantation rate, and preterm delivery rate in women with and without fibroids, and in women who underwent myomectomy.

Result(s): Women with subserosal fibroids had no differences in their fertility outcomes compared with infertile controls with no myomas, and myomectomy did not change these outcomes compared with women with fibroids in situ. Women with intramural fibroids appear to have decreased fertility and increased pregnancy loss compared with women without such tumors, but study quality is poor. Myomectomy does not significantly increase the clinical pregnancy and live birth rates, but the data are scarce. Fibroids with a submucosal component led to decreased clinical pregnancy and implantation rates compared with infertile control subjects. Removal of submucosal myomas appears likely to improve fertility.

Conclusion(s): Fertility outcomes are decreased in women with submucosal fibroids, and removal seems to confer benefit. Subserosal fibroids do not affect fertility outcomes, and removal does not confer benefit. Intramural fibroids appear to decrease fertility, but the results of therapy are unclear. More high-quality studies need to be directed toward the value of myomectomy for intramural fibroids, focusing on issues such as size, number, and proximity to the endometrium. (Fertil Steril® 2009;91:1215–23. ©2009 by American Society for Reproductive Medicine.)

Key Words: Fibroids, infertility, myomectomy, ART, leiomyomata, fertility

- Two systematic reviews
 - One RCT
- Cochrane – restricted to RCTs
 - A large benefit with the hysteroscopic removal of submucous fibroids for improving the chance of clinical pregnancy in women with otherwise unexplained subfertility cannot be excluded.
- Pritts et al;
 - Fertility outcomes are decreased in women with SMFs and removal appears to confer benefit
 - Clinical pregnancy
 - Not miscarriage

Surgical management of intrauterine pathology

Clinical outcomes: Infertility & SMFs

TABLE 3

Effect of fibroids on fertility: submucous fibroids.

Outcome	Number of studies/ substudies	Relative risk	95% confidence interval	Significance
Clinical pregnancy rate	4	0.363	0.179–0.737	<i>P</i> = .005
Implantation rate	2	0.283	0.123–0.649	<i>P</i> = .003
Ongoing pregnancy/live birth rate	2	0.318	0.119–0.850	<i>P</i> < .001
Spontaneous abortion rate				
Preterm delivery rate				

Pritts. Fibroids and

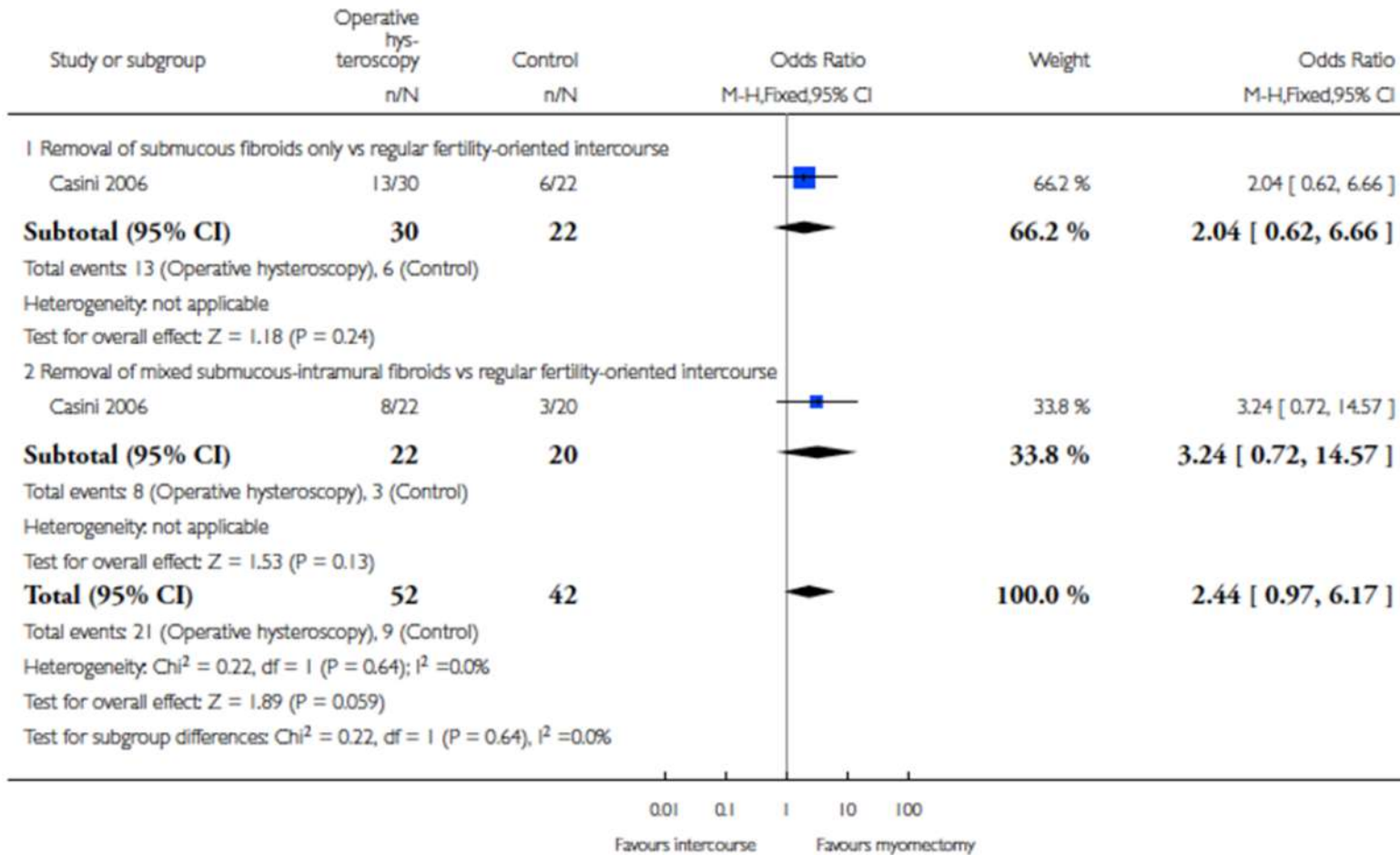
TABLE 6

Effect of myomectomy on fertility: submucosal fibroids.

Outcome	Number of studies/ substudies	Relative risk	95% confidence interval	Significance
A. Controls: fibroids in situ (no myomectomy)				
Clinical pregnancy rate	2	2.034	1.081–3.826	<i>P</i> = .028
Implantation rate	0	—	—	—
Ongoing pregnancy/live birth rate	1	2.654	0.920–7.658	Not significant
Spontaneous abortion rate	1	0.771	0.359–1.658	Not significant
Preterm delivery rate	0	—	—	—
B. Controls: infertile women with no fibroids				
Clinical pregnancy rate	2	1.545	0.998–2.391	Not significant
Implantation rate	2	1.116	0.906–1.373	Not significant
Ongoing pregnancy/live birth rate	3	1.128	0.959–1.326	Not significant
Spontaneous abortion rate	2	1.241	0.475–3.242	Not significant
Preterm delivery rate	0	—	—	—

Pritts. Fibroids and infertility. Fertil Steril 2009.

Hysteroscopic myomectomy vs. no surgery: Clinical Pregnancy



Surgical removal to enhance reproductive function

Surgery:

1. Lyse all adhesions
2. Restore the shape and dimensions of the uterine cavity
3. Identify both tubal ostia.
 - In this way communication between the cervical canal and fallopian tubes via a normal volume uterine cavity is restored allowing normal menstrual flow and adequate sperm transportation for fertilisation and implantation to occur.
4. Consider concomitant imaging
 - Fluoroscopy, ultrasound, laparoscopy

Following surgery:

1. Stimulate endometrial repair and regeneration
2. Prevent reformation of IUAs
3. Restore normal reproductive function, ultimately confirming tubal patency.
4. Repeated surgeries are often necessary as adhesions can often recur spontaneously



Evidence for the surgical management of proximal tubal blockage

Human Reproduction, Vol.32, No.4 pp. 836–852, 2017

Advanced Access publication on February 10, 2017 doi:10.1093/humrep/dex022

human
reproduction

META-ANALYSIS Infertility

Fallopian tube catheterization in the treatment of proximal tubal obstruction: a systematic review and meta-analysis

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Submitted on July 31, 2016; resubmitted on November 12, 2016; accepted on January 25, 2017

STUDY QUESTION: What is the chance of clinical pregnancy when fallopian tube catheterization is used for proximal tubal obstruction?

SUMMARY ANSWER: The pooled clinical pregnancy rate of tubal catheterization after proximal tubal obstruction is 27% (95% CI 25–30%).

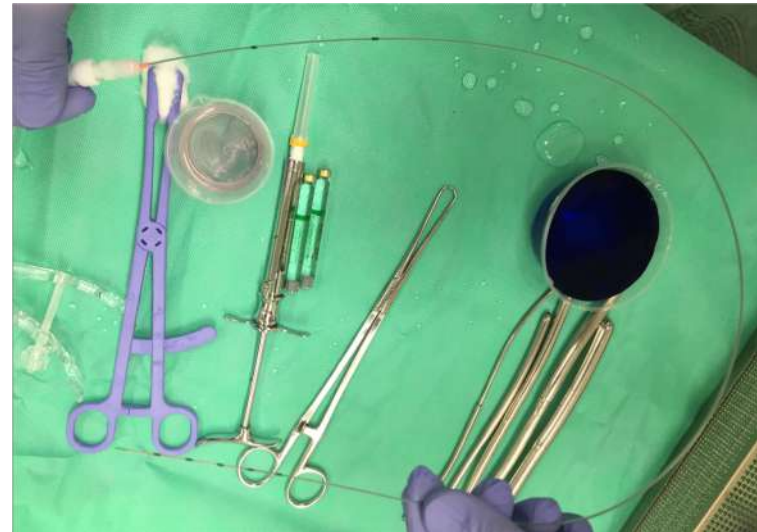
WHAT IS KNOWN ALREADY: Restoring fallopian tube patency by performing tubal catheterization has fallen out of favour since the increased availability of IVF. Our study is the first systematic review and meta-analysis to investigate reproductive outcomes following tubal catheterization for proximal tubal obstruction.

STUDY DESIGN, SIZE, DURATION: We undertook a systematic review and meta-analysis of 27 observational studies consisting of 1720 patients undergoing tubal catheterization for proximal tubal obstruction, who attempted to conceive naturally after the procedure.

PARTICIPANTS/MATERIALS, SETTING, METHODS: Systematic literature searches were performed in MEDLINE, EMBASE and the Cochrane Central Register of Controlled Trials. A total of 2195 titles and abstracts were reviewed. Only studies that reported outcomes when tubal catheterization was performed with no other tubal surgery were included. Twenty-seven cohort studies matched the inclusion criteria for the meta-analysis.

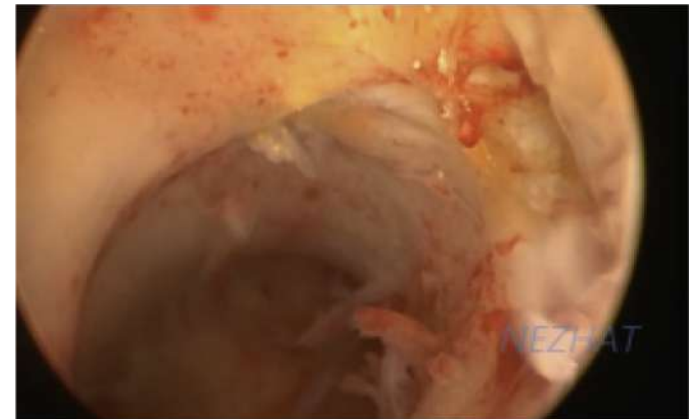
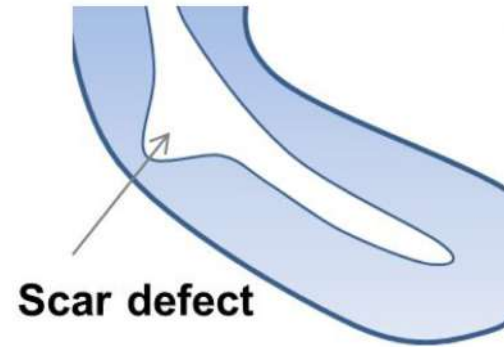
MAIN RESULTS AND THE ROLE OF CHANCE: The meta-analysis showed a pooled clinical pregnancy rate of 27% (95% CI 25–30%) after the use of tubal catheterization for unilateral or bilateral proximal tubal obstruction (27 studies, 1556 patients). In women with bilateral obstruction (14 studies, 617 patients), the clinical pregnancy rate was 27% (95% CI 23–32%). Our meta-analysis demonstrated that the pooled cumulative clinical pregnancy rates were 22.3% (95% CI 17.8–27.8%) at 6 months, 25.8% (95% CI 21.1–31.5%) at 9 months, 26.4% (95% CI 23.0–30.2%) at 12 months, 26.0% (95% CI 22.8–29.7%) at 18 months, 27.0% (95% CI 24.0–30.5%) at 24 months, 27.9% (95% CI 24.9–31.3%) at 36 months and 28.5% (95% CI 25.5–31.8%) at 48 months. The pooled live birth rate (14 studies, 551 patients) was 22% (95% CI 18–26%). The pooled ectopic pregnancy rate (27 studies, 1556 patients) was 4% (95% CI 3–5%). The included studies scored satisfactorily on the Newcastle-Ottawa quality assessment scale.

LIMITATIONS, REASONS FOR CAUTION: The pooled clinical pregnancy rate after tubal catheterization was found to be almost comparable to that after IVF. However, included studies were small, non-comparative series with significant clinical heterogeneity in population characteristics, follow-up and surgical equipment, technique and experience.



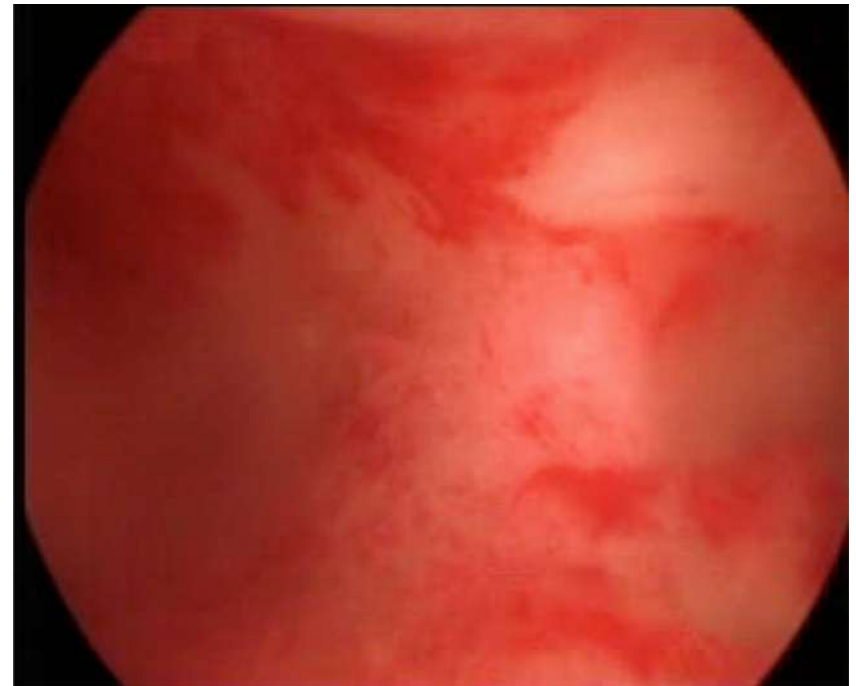
Why do cervical niches cause reproductive failure?

- Collection of fluid
 - Impacts on implantation
 - Intefere with embryo transfer



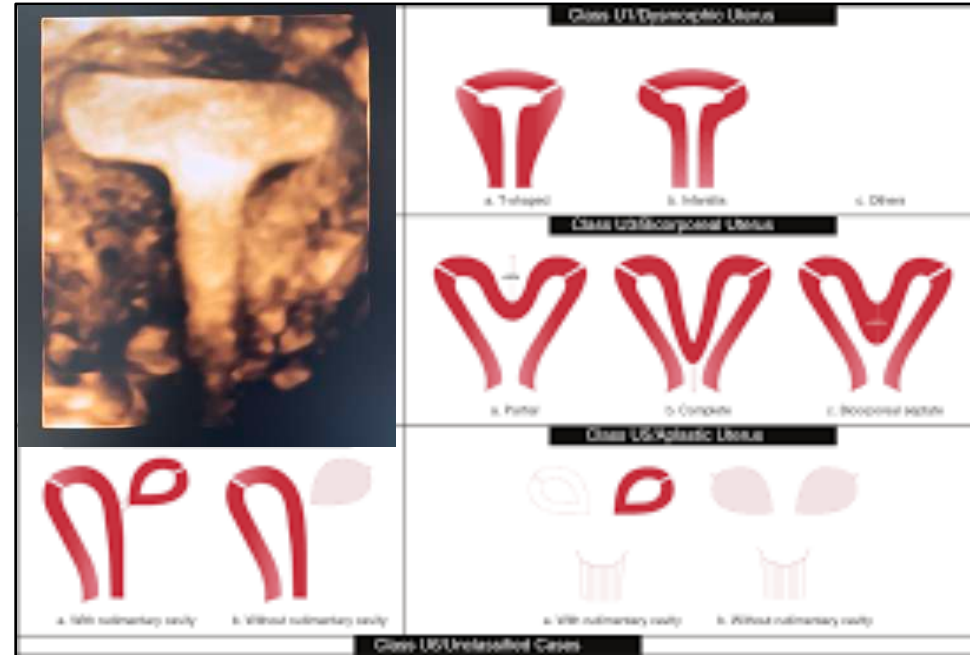
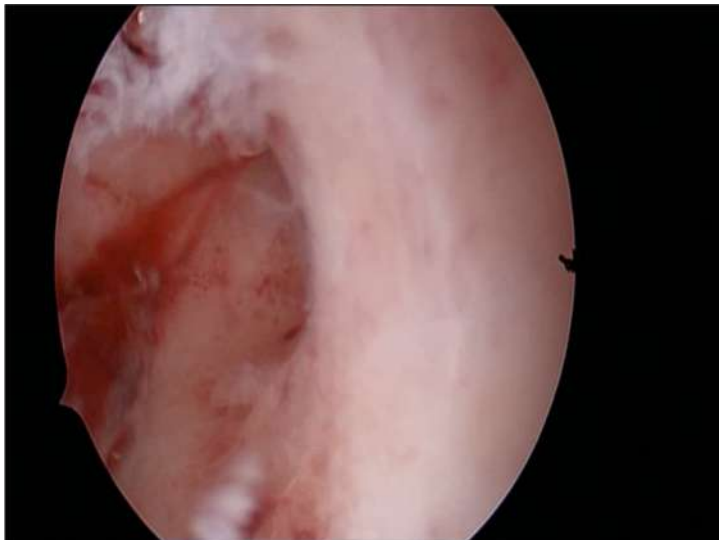
Uterine septum and reproductive failure

- Evidence for the effectiveness of resecting the uterine septum (uterine septoplasty) is limited to mostly small, uncontrolled retrospective studies, in which improved clinical pregnancy and live birth rates have been reported¹⁻²
- A multicentre RCT is currently underway (the TRUST study) to assess whether hysteroscopic septoplasty improves reproductive outcome.



Why do underdeveloped uteri cause reproductive failure?

- Structural
 - Implantation failure
 - Uterine capacity / contractility
 - Endometrial inactivity



Ambulatory gynaecology

WIDENING THE CONCEPT

Setting up Ambulatory Care in Gynaecology

ACUTE GYNAECOLOGY & EARLY PREGNANCY COMPLICATIONS

Acute gynaecology

- Bartholin's
- Miscarriage
- RPOC

Bartholin's cyst / abscess

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General gynaecology

Word catheter and marsupialisation in women with a cyst or abscess of the Bartholin gland (WoMan-trial): a randomised clinical trial

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Objective To compare recurrence of a cyst or abscess of the Bartholin gland after surgical treatment using a Word catheter or marsupialisation.

Design Multicentre, open-label, randomised controlled trial.

Setting Eighteen hospitals in the Netherlands and one hospital in England.

Population Women with a symptomatic cyst or abscess of the Bartholin gland.

Methods Women were randomised to treatment with Word catheter or marsupialisation.

Main outcome measures The primary outcome was recurrence of the cyst or abscess within 1 year of treatment. The secondary outcomes included pain during and after treatment (measured on a 10-point scale), use of analgesics, and time from diagnosis to treatment. Analysis was by intention-to-treat. To assess whether marsupialisation would reduce the recurrence rate by 5% (from 20 to 15%) we needed to include 160 women (alpha error 0.05, beta error 0.2).

Results One hundred and sixty-one women were randomly allocated to treatment by Word catheter ($n = 82$) or marsupialisation ($n = 79$) between August 2010 and May 2014. Baseline characteristics were comparable. Recurrence occurred in 10 women (12%) allocated to Word catheter versus eight women (10%) allocated to marsupialisation: relative risk (RR) 1.1, 95% confidence interval (CI) 0.64–1.91; $P = 0.70$. Pain scores after treatment were also comparable. In the first 24 hours after treatment, 33% used analgesics in the Word catheter group versus 74% in the marsupialisation group ($P < 0.001$). Time from diagnosis to treatment was 1 hour for placement of Word catheter versus 4 hours for marsupialisation ($P = 0.001$).

Conclusions In women with an abscess or cyst of the Bartholin gland, treatment with Word catheter and marsupialisation results in comparable recurrence rates.

Keywords Bartholin gland, marsupialisation, Word catheter.

Tweetable abstract Comparable recurrence rates for treatment of Bartholin's abscess/cyst with Word catheter and marsupialisation.

Linked article This article is commented on by S Bakour, p. 250 in this issue. To view this mini commentary visit <http://dx.doi.org/10.1111/1471-0528.14375>.

Please cite this paper as: Kroese JA, van der Velde M, Morssink LP, Zafarmand MH, Geomini P, van Kesteren PJM, Radder CM, van der Voet LF, Roovers JPWR, Graziosi GCM, van Baal WM, van Bavel J, Catshoek R, Klinkert ER, Huirne JAF, Clark TJ, Mol BWJ, Reesink-Peters N. Word catheter and



Bartholin's cyst / abscess

Outpatient Management of Bartholin's Cyst and Abscess: Balloon Catheter | Insertion Guidelines

Version:	1.0
Name of approving committee:	Gynaecology Directorate
Ratified by:	Gynaecology Directorate
Date ratified:	
Date issued:	
Review date:	
Name of Lead Officer	Dr
Name of originator/author:	Dr Amina Douglas (AD); Prof T Justin Clark (TJC), Mary Eyo
Job title of author:	Specialist Registrar year 7; Consultant O&G, Specialist Registrar year 3
Target audience:	Clinical staff / Gynaecology Directorate

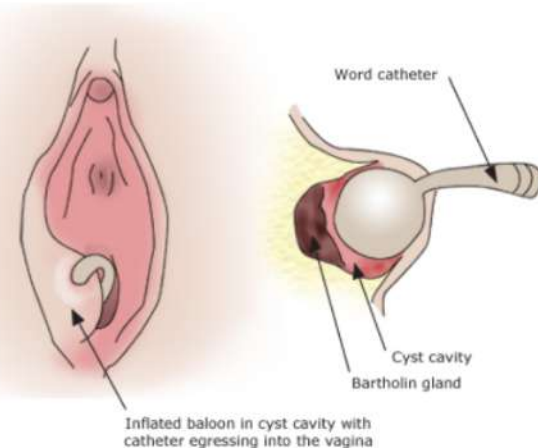
7.12.2. Intraoperative

The RGN will work from the working trolley providing necessary assistance to the clinician.

The clinician will:

Clean the skin surrounding the cyst/abscess

- Palpate the cyst / abscess
- Apply xylocaine 10% spray or ~~vapo~~-coolant spray (ethyl chloride e.g. ~~axongesic~~[®])
- Grasp the cyst with a small pair of forceps or between finger and thumb to stabilise
- Make a 0,5cm (stab) incision with a no.11 blade, within the introitus external to the hymenal ring
- Take a pus swab for MC&S
- Drain the contents of the cyst/abscess
- Irrigate the cavity with 0.9% ~~NaCl~~ x 10-20mls
- Insert the bulb tip of the catheter into the cyst/abscess cavity and then inflate with 5mls 0.9% ~~NaCl~~
- Place the free end of the catheter in the vagina
- Leave the catheter in place for 6 weeks.



Bartholin's cyst / abscess

What should I expect following the operation?

In both procedures some discomfort for 2—3 days and wound discharge may be experienced for up to 2 weeks following balloon catheter insertion.

You can go about normal activities, including sexual intercourse, as soon as you feel comfortable (including while the catheter is in place).

What should I expect following the balloon catheter insertion?

You will be prescribed with a course of antibiotic tablets to take for one week.

If the catheter falls out within 10 days, you will be assessed to decide whether another catheter should be put in or whether you would prefer to have a marsupialisation procedure. If the catheter remains in place, you will be seen 6 weeks following the procedure for assessment.

When can I return home?

Marsupialisation is a day-case procedure requiring a general anaesthetic. You will be able to return home 2-4 hours following the operation, once you have mobilised, eaten and passed urine.

Balloon catheter insertion is a quick, outpatient procedure performed with you awake. You will be able to return home as soon as you are comfortable which is usually within 1-2 hours following your outpatient appointment.

Can I avoid surgical treatment?

Abscesses when small can resolve on their own with or without the use of antibiotics. However when an abscess is large, antibiotics will not clear the infection. Also if the abscess is left to discharge ('burst') on its own, the swelling can become very painful and you may develop a fever and feel unwell.

Drainage of the collection of pus is needed to remove the abscess and relieve symptoms in most cases.

Where can I find more information on Bartholin's abscess?

Further information is available on the following NHS website:
NHS Choices. (2013). Bartholin's Cyst and Abscess. (www.nhs.co.uk)

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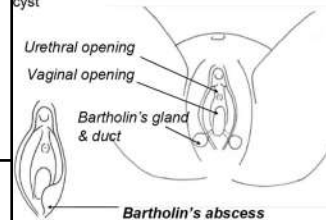

Birmingham Women's and Children's
 NHS Foundation Trust

Bartholin's Abscess or Cyst Treatment Options

What is a Bartholin's abscess?

The Bartholin's glands are located on either side of the entrance to the vagina.

An infection of the gland can cause a painful collection of pus called a Bartholin's abscess. This painful swelling is a common problem in women of reproductive age and can limit normal activity. Sometimes the gland swells without infection and this is called a Bartholin's cyst



What treatment is available?

Two procedures are available to treat a Bartholin's abscess. Both treatments aim to drain the abscess, to relieve symptoms and to minimise the chance of the abscess reforming (recurrence).

These treatments are:

- Marsupialisation**—this requires hospital admission and a general anaesthetic
- Balloon catheter insertion**—this is a convenient and quick outpatient procedure during which you don't need to be put to sleep.

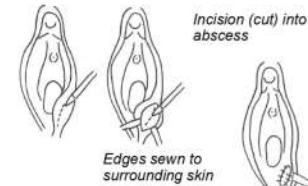
There is no difference in the number of women who return with another abscess after treatment with either marsupialisation or balloon catheter insertion.

Women tend to wait less time to have treatment and require less pain relief after treatment when having a balloon catheter insertion.

Marsupialisation

This is a surgical procedure performed in the operating theatre under general anaesthetic (while you are asleep).

- An incision (cut) is made into the abscess cavity which is drained and washed out
- The edges of the abscess are sewn to the surrounding skin
- The cavity remains open to drain freely following the surgery
- This will heal gradually over 4-6 weeks and reduce in size until it is no longer noticeable.

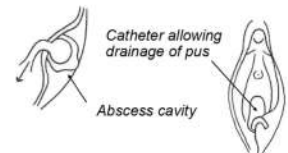


Complications: Serious complications are rare but bleeding, pain, infection and scar formation can occur.

Balloon catheter insertion

This procedure can be carried out in clinic in the outpatient department. A local anaesthetic (numbing or cool spray) is applied to the area. This means you can remain awake during the procedure.

- An incision (cut) is made into the abscess cavity which is drained and washed out
- A short catheter (tube) is inserted into the cavity. This allows free drainage of the swelling following the operation and prevents the abscess from reforming
- A balloon on the tip of the catheter is inflated to keep the catheter in place in the abscess cavity
- The free end of catheter can be placed into the vagina where it will drain
- The catheter remains in the cavity for 2-6 weeks before it spontaneously falls out or is removed by your doctor



Complications: Serious complications are rare but bleeding, pain, infection and early fall out of the catheter (requiring a repeat procedure) can occur.

Miscarriage



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Short communication

Manual vacuum aspiration: a safe alternative for the surgical management of early pregnancy loss

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Manual vacuum aspiration (MVA) is an alternative to the standard surgical curettage, performed under local anaesthetic in the setting of a treatment room. The aim of our study was to assess the efficacy of MVA in the management of first trimester early fetal demise and first- and mid-trimester incomplete miscarriage. This was a retrospective study of 246 patients who were scheduled to undergo MVA for first trimester early fetal demise and first- and mid-trimester incomplete miscarriage. One woman was excluded in the analysis because of the procedure

being abandoned prior to MVA. Efficacy of the procedure was 94.7% (232/245). Incomplete uterine evacuation was seen in 5.3% (13/245) patients. Although not widely used in the UK, MVA could be considered routinely, thus avoiding general anaesthesia and the need for access to theatre.

Keywords Early pregnancy loss, manual vacuum aspiration, miscarriage, surgical evacuation.

Chronic retained products of conception

- HYMNN trial
- Consign blind surgical management of ERPC to history

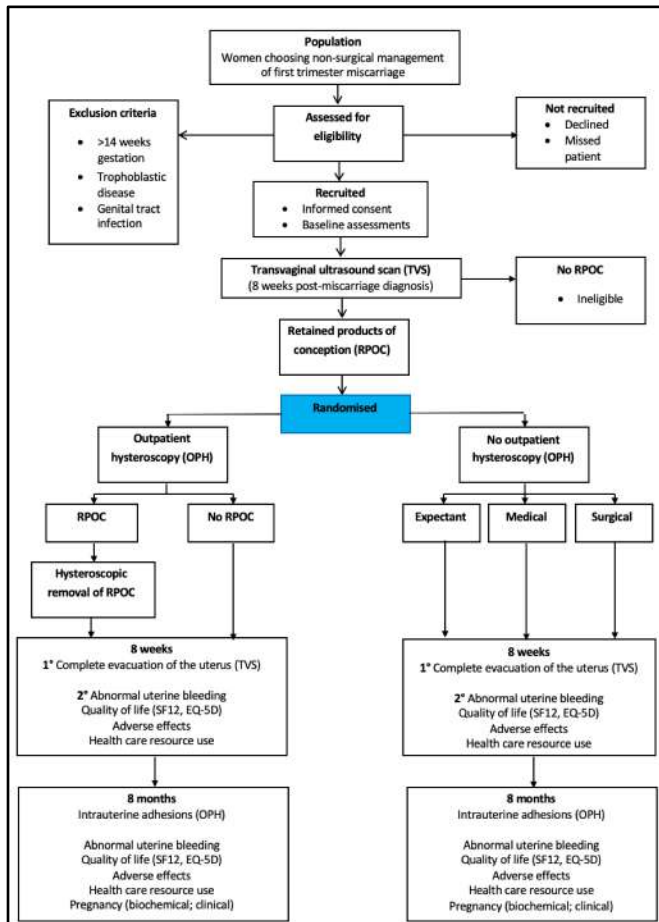
Why do chronic RPOC cause reproductive failure?

- Postulated that they may delay subsequent fertility:
 - Direct effects on endometrial function
 - Endometrial inactivation
 - Endometritis (inflammation / infection)
 - Abnormal uterine bleeding
 - Indirect effects
 - Adhesion formation / Asherman's syndrome arising from blind suction / D&C to remove RPOC



Evidence for the surgical management of chronic RPOC to enhance fertility

- Data are lacking but a trials proposed / underway (PLACEMTA, HYPISTAT, HARP; Birmingham Pilot (HYMNN – below):



Setting up Ambulatory Care in Gynaecology

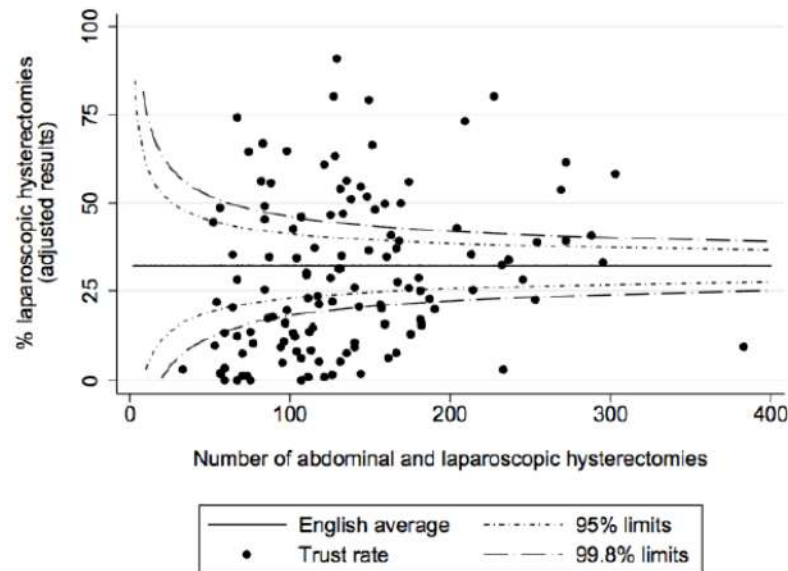
HYSTERECTOMY

Patterns of Benign Gynaecology Care in English NHS Hospital Trusts

2015/16



3. Proportion of abdominal/laparoscopic hysterectomies performed via the laparoscopic route



Amongst abdominal and laparoscopic hysterectomies, the mean proportion that were laparoscopic was 32.0%. The mean among trusts in the lowest decile for this indicator was 1.1% vs. 72.1% among trusts in the highest decile.

Patterns of Benign Gynaecology Care in English NHS Hospital Trusts

2015/16



Length of stay following hysterectomy (all types combined)

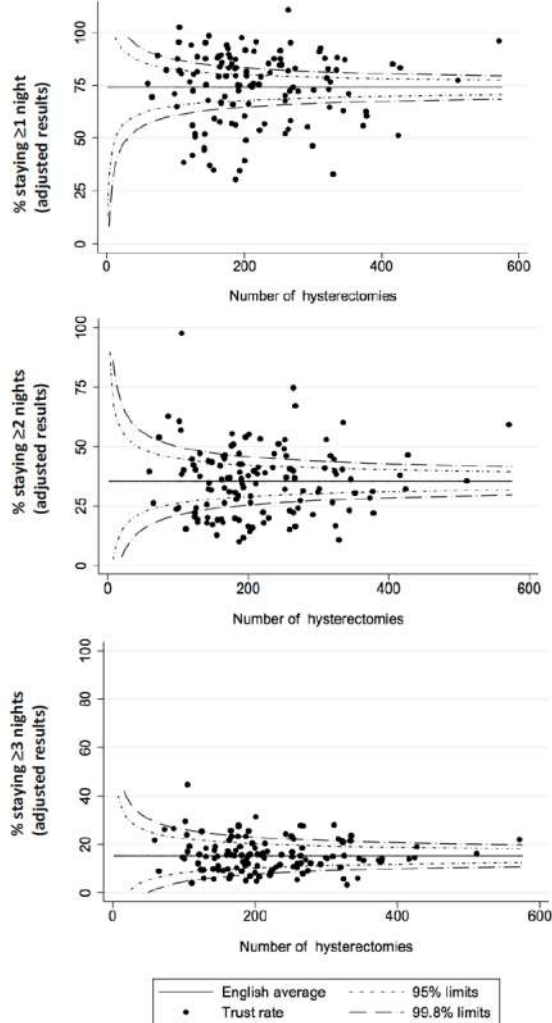
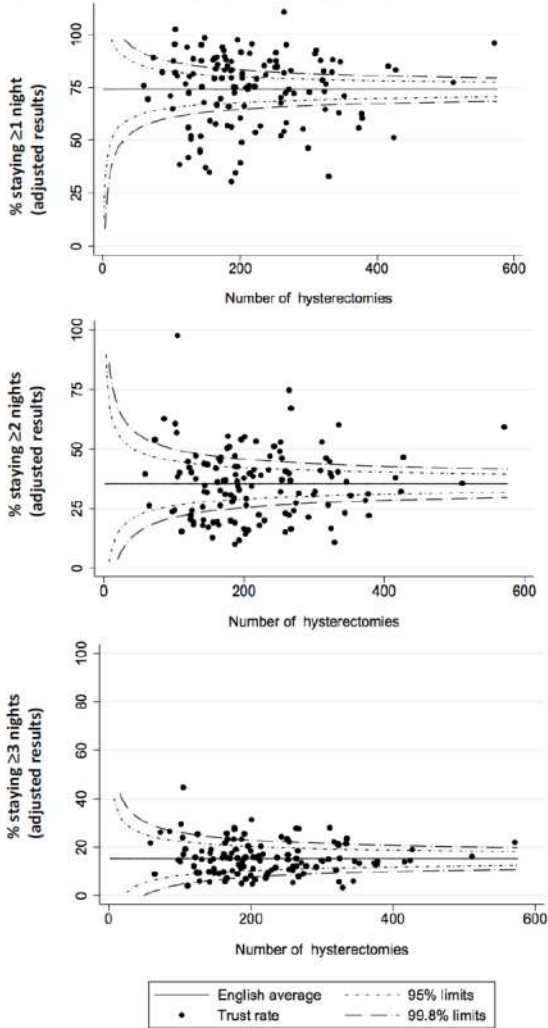


TABLE 4: LENGTH OF STAY BY TYPE OF HYSTERECTOMY

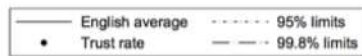
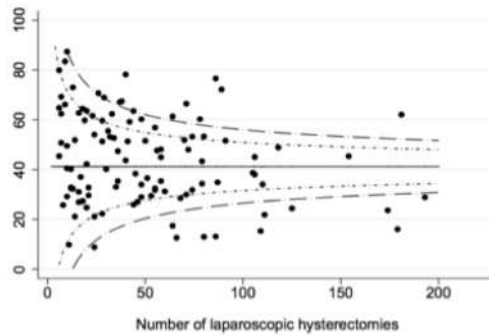
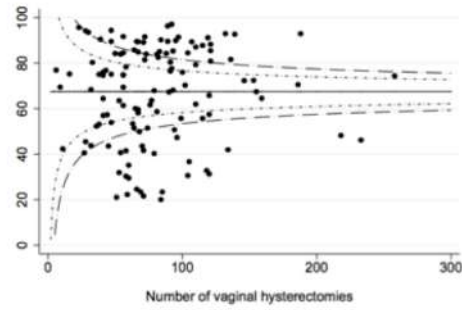
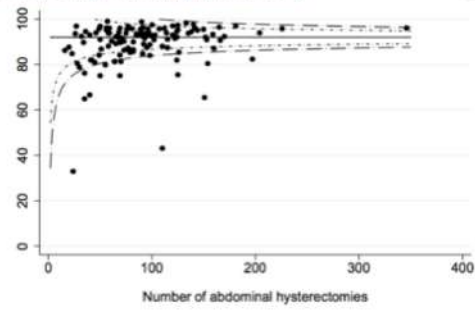
	Type of hysterectomy	National mean (%)	Mean in lowest decile (%) [*]	Mean in highest decile (%) [*]
Length of inpatient stay	≥3 nights			
	H ⁱ	15.3	5.4	29.0
	AH ⁱⁱ	24.2	8.7	39.4
	VH ⁱⁱⁱ	7.2	1.0	21.6
	LH ^{iv}	4.6	0.0	18.4
	≥2 nights			
	H ⁱ	35.5	14.6	63.1
	AH ⁱⁱ	55.8	25.2	78.4
	VH ⁱⁱⁱ	21.1	4.8	51.2
	LH ^{iv}	12.8	0.0	36.3
	≥1 night			
	H ⁱ	74.0	40.2	97.4
AH ⁱⁱ	92.0	68.8	97.4	
VH ⁱⁱⁱ	67.4	26.4	93.7	
LH ^{iv}	41.2	15.4	76.0	

Footnote: ^{*}After adjustment for demographic and clinical factors available in the dataset. ⁱH=Hysterectomy (all types combined); ⁱⁱAH=Abdominal hysterectomy; ⁱⁱⁱVH=Vaginal Hysterectomy (including laparoscopically assisted vaginal hysterectomy); ^{iv}LH=Laparoscopic hysterectomy=total laparoscopic hysterectomy or subtotal laparoscopic hysterectomy

Length of stay following hysterectomy (all types combined)



Length of stay ≥ 1 night following hysterectomy



Patterns of Benign Gynaecology Care in English NHS Hospital Trusts

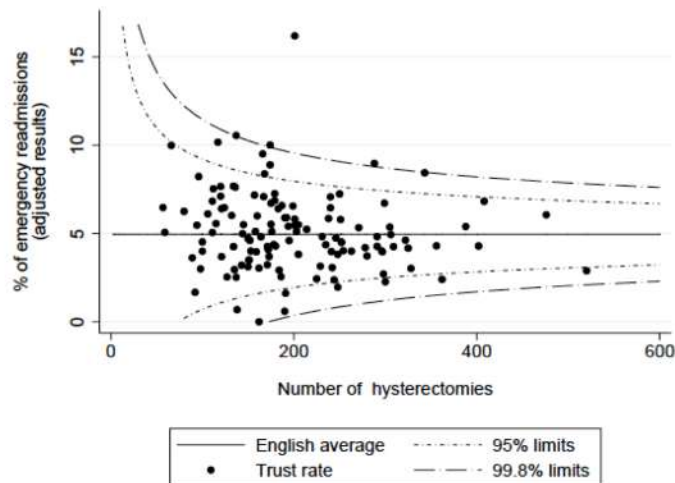
2015/16



Results

Emergency readmission within 30 days of hysterectomy (all types combined)

Amongst all hysterectomies, the mean rate of emergency readmission within 30 days was 5.0%. The mean rate was 1.8% among trusts in the lowest decile, and 9.7% among trusts in the highest decile, after adjustment for case-mix variation. The distribution of primary diagnoses for emergency readmission within 30 days is shown on the right below (The main reasons for emergency readmission were the same for each type (data not shown)).

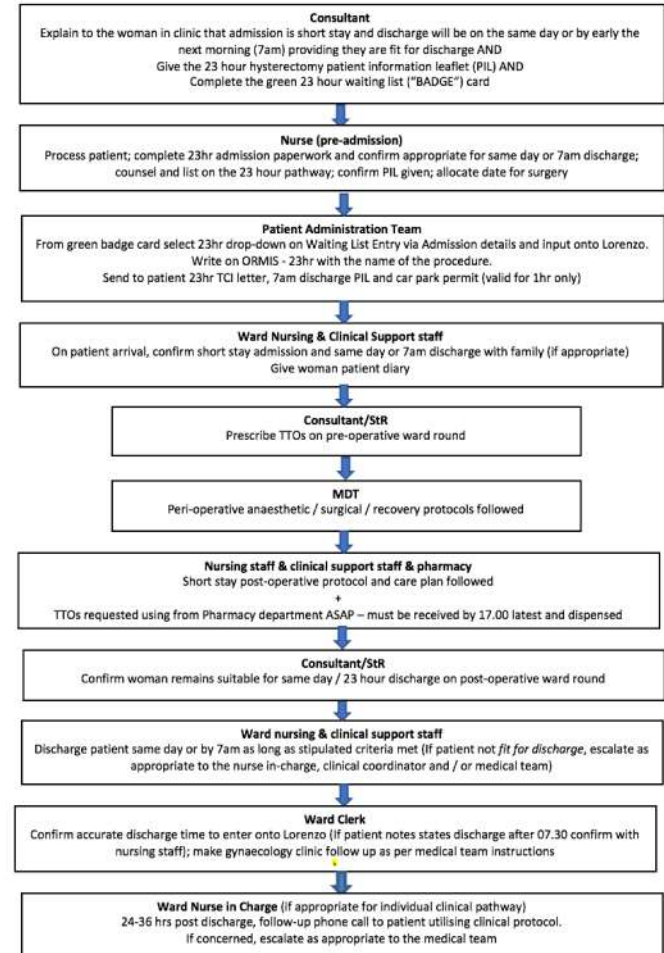


Primary diagnosis	Frequency among those readmitted as emergencies (%)
Haemorrhage	298 (21.2)
Infection	290 (20.6)
Constipation	73 (5.2)
Other and unspecified abdominal pain	71 (5.1)
Urinary tract infection	68 (4.8)
Pain localised to other parts of lower abdomen	62 (4.4)

Footnote: Only the most commonly recorded primary diagnoses associated with readmission are presented so the column does not sum to 100%

Short stay hysterectomy pathway 2018:

Short stay hysterectomy pathway: Flow diagram



Short stay hysterectomy pathway: Eligibility criteria

Patient factors

- Adequate motivation and understanding
- ASA I/II with no sleep apnoea
- No known cardio-pulmonary compromise
- No known renal disease
- Age < 60 years
- BMI \leq 35
- Not indication for admission to Gynaecological Extended Recovery Area (GERU)

Surgical factors

- Presumed benign disease
- No anticipated surgical complications
- Concomitant procedures acceptable but surgeon to decide on a case by case basis

Discharge factors

- Residence < 1 hour from BWCH
- Access to transport from hospital to home
- Continuous home support for 24 hours

Short stay hysterectomy pathway: Peri-operative protocol including post-operative recovery (anaesthetic and surgical)

- List planning
 - Morning ideally
- Anaesthetic
 - Pre-medication avoid if possible except antacid where indicated
 - Induction (as per anaesthetists preference)
 - Maintenance (as per anaesthetists preference)
 - Avoidance of long-acting narcotics to avoid somnolence and potentiation of urinary retention
 - Multi-modal anti-emetics
 - Judicious fluid management (ensure hydration but avoid bladder overdistension)
 - Patient warming – ensure normothermia
 - Local anaesthesia
 - Cutaneous ports – (timing (pre or post incision) and depth of infiltration (into the subcutaneous tissues) according to surgeon / anaesthetist preference)
 - Laparoscopic transverse abdominus plane (TAP) blocks
 - Consider pulmonary recruitment manoeuvre (according to anaesthetist / surgeon preference)
- Surgical
 - Laparoscopic
 - Low pressure gynaecological laparoscopy (consider Air Seal or **Ultravision** systems and open or continuous visual entry with optical ports according to surgeons preference)
 - Avoid drains
 - Early (within 6 hours and consider immediate) catheter removal (according to surgeons preference)
 - Recovery

- Analgesia – regular multi-modal analgesia to ensure patient comfort and optimal recovery
 - Paracetamol; Non-steroidal anti-inflammatory drugs (NSAIDS); opioids as required
- Anti-emesis – minimise nausea (ensure patient can tolerate fluids / diet)
 - **Cyclizine**; ondansetron

Short stay hysterectomy: Patient diary

What needs to happen before you go home		Tick box	Time achieved
Recovery goals (14)			
Mobilising	1. You should be able to sit out of bed and stand comfortably		
	2. You should be able to walk up and down the length of the ward without too much difficulty (i.e. with minimal support)		
	3. You should be able to dress unaided		
Diet			
	1. You should be able to drink normally		
	2. You should be able to eat a light diet (for example foods like cereal, toast, soup, mashed potato, pasta, yoghurt)		
Passing urine			
	1. If you have a urinary catheter in place then this should be removed by the nursing staff after 4-6 hours on the ward.		
	2. You should be able to pass urine within 4 hours after your catheter is removed. The nursing staff should check using a bladder scan that you are emptying your bladder satisfactorily		
	OR If you cannot pass water or empty your bladder well enough then the nursing staff should place another catheter and they should give you an appointment to return to hospital within the next 2 days to have it removed.		
Wound			
	Your wound should be satisfactory according to medical or nursing staff assessment		
Blood tests			
	If the medical staff request a blood test to check for anaemia (usually 6 hours after surgery) then you should be informed if it is satisfactory and whether you will need to take oral iron tablets		
Pain control			
	1. Your pain should be controlled with oral analgesics ('pain killers')		
	2. Your pain should be no more than mild at rest or moderate when you move		
General health			
	1. The nursing staff should inform you if they are happy with the observations they regularly take from you. These 'vital signs'		

Short stay hysterectomy pathway: Clinical discharge criteria (nurse)

(The patient should NOT be discharged by a nurse if non-compliant with any of the criteria unless reviewed and sanctioned by a member of the medical staff)

Discharge criterion	Complied (tick box)	Actions if non-compliant
Uncomplicated surgery		
Surgery performed without complications (to be defined by surgeon)		-
EBL <500mL		-
Non-conversion to laparotomy		-
Post-operative observations¹		
Complied with MEWS chart – stable and normal vital signs and ability to maintain oxygen saturation levels >95% on room air		Escalate to medical staff
Post-operative progress¹		
Tolerated oral fluids and light diet without significant nausea / vomiting		-
Adequate control of nausea and vomiting		-
Adequate pain control with an oral regimen based upon paracetamol, NSAIDs and codeine but NO oral morphine required in the preceding 4 hours		-
Voiding spontaneously and emptying the bladder satisfactorily (bladder scan) OR willing to go home with an indwelling urinary catheter (removal within 48 hours)		-
Post-operative examination and tests		
Satisfactory abdominal examination = soft, minimally tender, no more than moderately distended (i.e. not tense) and unremarkable (dry and non-gaping) port site wounds		Escalate to medical staff
6 hour haemoglobin level is in the normal range AND has not dropped > 20g/L from the pre-operative level. ³		Escalate to medical staff
Medications to take home		
TTO's prescribed by the medical staff and given to patient with instructions for use		
Routine analgesics - NSAIDs / paracetamol: Standard protocol: ibuprofen 800mg tds x 4 days – BWCH pharmacy will issue 1 box of 24 x 400mg tablets (if contraindicated then alternative e.g. codeine based analgesic - codeine 60mg qds). Patients to be advised to revert to standard 400mg tds ibuprofen		



By your

dose (buy from supermarket / pharmacy) after 4 days. Patients to be advised to take paracetamol as required (maximum 1g (2 tablets) 4 times per day).		
Routine stool softeners - lactulose / senna		
Routine antiemetics – cyclizine or ondansetron		
Exceptional (only if requested and prescribed by medical staff) – please tick all that apply:		Ignore and strike through if no exceptional TTOs prescribed
• Opioids		
• Antibiotics		
• Hormone replacement therapy		
• Low molecular weight heparin (clexane / dalteparin – according to standard gynaecology VTE protocol)		
Post-discharge care		
Someone at home to act as a carer for the next 24 hours		
Patient phone number recorded to receive a post-operative phone call from the nursing staff the next day		
Written patient information and emergency contact numbers given		

1 Minimal 6-hours post-operative observation

2 Escalate to medical staff if unsure or thought to be abnormal

3 If abnormal medical staff may consider acceptable according to the clinical circumstances (e.g. patient well and: low starting haemoglobin concentration; <20g/L decrease; acute intra-operative bleed only)

Short stay hysterectomy pathway: Day one nurse phone call: Interview schedule:

(Nurse to document (ring and add free text) patient responses to all questions and actions taken)



Question	Response	Action	Free text
Abdominal pain	1. Severe - not manageable with oral analgesics	Return to hospital (escalate to medical staff for urgent review)	
	2. Moderate - manageable with oral analgesics	Advice + follow up call next day ²	
	3. Mild - manageable with oral analgesics / nothing	-	
	4. None	-	
Nausea & vomiting	1. Severe - not tolerating fluids	Return to hospital (escalate to medical staff for urgent review)	
	2. Moderate – tolerating fluids	Advice + use anti-emetic TTOs + follow up call next day ²	
	3. Mild – tolerating fluids and light diet	-	
	4. None	-	
Fever (general enquiry)	1. ¹ Severe – feeling hot/sweaty or cold + one of: (i) malaise / lethargy; (ii) rigors; (iii) feeling faint / weak	Return to hospital (escalate to medical staff for urgent review)	
	2. ¹ Moderate - feeling hot/sweaty or cold	Advice + consider antibiotics – escalate to medical staff	
	3. Mild – malaise / lethargy but no other symptoms	Advice + follow up call next day ²	
	4. None	-	
Fever (specific enquiry)	<ul style="list-style-type: none"> • <i>Urinary infection</i> – dysuria, frequency or haematuria. • <i>Wound infection</i> – red, hot, tender, swollen, 	Return to hospital (escalate to medical staff for urgent review)	

	bruised, smelly or discharging		
	<ul style="list-style-type: none"> • <i>Gastrointestinal / peritonitis</i> – severe abdominal pain, bilious / faeculent vomiting, diarrhea, ileus (abdominal distension, nausea & vomiting + no flatus PR) • <i>Respiratory infection / pulmonary embolus</i> – shortness of breath, pleuritic chest pain, persistent dry or productive cough, haemoptysis. • <i>Deep venous thrombosis</i> – red, swollen, painful leg +/- shortness of breath / pleuritic chest pain 		
Other symptoms	Identify	Advice + consider escalation to medical staff	
Patient concerns	Identify	Advice + consider escalation to medical staff	
Patient questions	Encourage	Advice + consider escalation to medical staff	

1 Make a specific system enquiry

2 If symptoms persist to the same degree on the day 2 follow up call then escalate to medical staff



Short stay lapa

What is a Laparoscopic Hysterectomy?

A laparoscopy is sometimes called keyhole surgery. This means an operation that is performed via a small telescope inserted into the belly button. The procedure avoids needing a large open cut on the abdomen (tummy).

A **total** hysterectomy involves removing the womb (uterus) and the neck of the womb (cervix). A **subtotal** hysterectomy involves removing the uterus but not the cervix. You may also have the **ovaries** removed at the same time. The type of hysterectomy will be discussed with you by your Gynaecologist before the surgery.

Reasons for requiring this surgery include cancers of the womb or cervix, heavy periods or severe period pain. Alternative treatments to surgery will be discussed with you by your Gynaecologist.

What happens during the surgery?

This procedure is performed under a general anaesthetic meaning you will be **asleep**. A small tube (catheter) is put into the bladder to keep it empty through the surgery. Urine will drain from the tube into a collection bag. This will remain in the bladder until you are mobile on the ward after the operation.

A laparoscope (telescope attached to a camera) will be inserted through a cut in the belly button. Two to three more small cuts will be made to allow the surgeon to insert instruments into the abdomen which is then inflated with carbon dioxide gas to make more space to perform the operation. In a total hysterectomy the uterus and cervix will be removed through the vagina. The upper part of the vagina is then closed with stitches. If you have decided to keep your cervix, the uterus will be cut into smaller pieces so that it can be removed through a small cut in your abdomen. If the ovaries are also being removed this will happen at the same time.

What are the risks of the Surgery?

All operations have some associated risks with the surgery and these will be discussed with you by your Gynaecologist. They will also ask you to sign a consent form that explains the risks further.

The risks of the procedure include:

- Risks associated with anaesthesia - these risks will be discussed with you by your anaesthetist but include nausea and vomiting, sore throat, damage to teeth and allergy to the drugs used.
- Heavy bleeding that may require a blood transfusion or changing to an open surgical procedure
- Infection which can affect the wounds, the pelvis, the bladder, kidneys or chest
- Blood clots in the legs or the lungs
- Some pain and bruising around the site of the operation
- Damage to other structures in the abdomen such as the blood vessels, bowel, bladder or ureters (these are the tubes that carry urine from the kidneys to the

bladder). If this happens you may need further surgery to repair any structures that were damaged.

- Inability to complete the procedure via laparoscopy (keyhole) and need to convert to a laparotomy (open surgery).

What to expect on the day of your surgery?

On arrival to the ward, one of the nursing staff will show you to your bed space and answer any questions. They will check your pulse and blood pressure and ask you to provide a urine sample. They will also give you a wristband to wear confirming your details. You will also be seen by the surgical team performing the operation and the anaesthetist.

You can eat and drink normally up until 02:30 in the morning of your operation and we encourage you to drink a large glass of water between 5-6.30am. They will let you know the likely timing of the operation when you arrive and will allow you to drink water up until 2 hours before the time of surgery.

You will be given a hospital gown to change into and a pair of anti-embolism stockings to wear throughout your hospital stay. You should take these home and wear them until you are fully mobile. These are to reduce the risk of blood clots developing in the legs after surgery.

When it is time for your surgery a nurse will take you up to the theatre. They will also collect you after the procedure is finished.

After the Operation

You will wake up in the theatre recovery area after the procedure. You may have an oxygen mask to help with your breathing and drip in your arm to give fluids. You will have a small tube in the bladder called a catheter which is used to drain the bladder and keep it empty during the operation. Once you are able to walk around on the ward this will be removed which is usually within 4-8 hours of the operation.

You will have some discomfort in your tummy and/or shoulder tip which will gradually get better as you start to move around on the ward. The nurses will give you regular pain relief whilst in hospital.

You will have 3 to 4 small cuts around 0.5 – 1.5cm on you closed with dissolvable stitches and covered with small d removed after 24 hours. The stitches do not need to be r healed by 2 weeks after the operation. You should show this time to reduce the chance of infection.

What does short stay hysterectomy mean

Short stay hysterectomy refers to a package of care. This to inform you about what to expect before, during and a written, verbal and sometimes video information. You w complete, which charts your progress in hospital. It is up

When you are discharged from the ward the nursing staff will give you the appropriate telephone numbers to contact the hospital if you have any concerns. Your GP will also receive a letter telling them about the operation.

A designated nurse will phone you within 1-2 days of the operation to check on your progress and give any necessary advice. On occasion the nurse may recommend further phone call contacts or attendance at the hospital to see a doctor.

Most patients will be seen at 6-8 weeks after the operation in the Gynaecology outpatient clinic but this is at the discretion of your consultant or in keeping with your wishes.

If you require any further information or advice, please do not hesitate to contact the ward or your GP.

Useful Contacts

Ward 8: 0121 358180 or 0121 472 1377 – extension 5182 / 5185
Birmingham Women's and Children's Hospital, Edgbaston, Birmingham B15 2TG.

Royal College of Obstetricians and Gynaecologist: www.rcog.org.uk
The Hysterectomy Association: www.hysterectomy-association.org.uk

Author: Professor Justin Clark - Consultant Gynaecologist; Dr Helen Stevenson – Specialist Registrar in O&G
Further information is available on the Birmingham Women's & Children's NHS Foundation Trust Website www.bwnft.nhs.uk

complete it but we think it may help you understand how you will feel and also understand what will happen to you and how you are progressing during your hospital stay.

Your recovery will be quicker because we will undertake 'key-hole' surgery and adopt a specific recovery programme aimed at helping you to get better faster from the surgery, get home earlier and return to normal activities sooner. Your doctor will decide if you are suitable for this and the pre-operative nurses will explain the procedure at the pre-operative appointment.

To help with recovery you should try to keep healthy by exercising and avoiding smoking and alcohol in the 4 weeks prior to surgery. If you are overweight losing some weight before the operation will also help with a quicker recovery and reduce the risks of problems during the surgery.

The nursing staff will encourage you to drink so you are well hydrated and to start moving around as soon as possible after the surgery. This usually involves helping you to sit out in a chair at the bedside about 2-4 hours after you have returned to the ward and to be up and walking by 4-8 hours. Quicker mobilising after surgery will help your recovery and reduce the risks of blood clots forming. Once you are able to walk to the bathroom they will take the catheter out.

You will be given regular pain relief and can ask for more if required. As the operation is performed with a keyhole technique (without the need for an open cut on the abdomen), pain is usually managed with simple pain killers such as paracetamol and ibuprofen.

When will I be able to go home?

You are likely to be ready to go home either the evening of the operation (same day discharge) or the next morning at 07:30 (next morning discharge). However, we recognise that everyone recovers differently and you may need longer to recover or your doctor may request this after the operation. In general, once you are eating and drinking and can pass urine you will need to be able to walk around on the ward and be discharged.

aid the healing process once you are home
! 1-2 weeks. Full recovery can take about 4

ter the surgery. This will depend on the job es. You will be given a sick note for 4 weeks you feel able to easily do an emergency } work as soon as you feel able.

ng and discharge after the surgery. You tied (usually around 4-6 weeks).

Short-Stay Surgery – Patient Survey (at discharge)

Please circle your chosen answer

1. Did you attend a pre-operative assessment?

Yes (face to face) Yes (via phone) No

If yes, was this helpful and answered any questions you had?

 Yes  No  Don't know/not sure

2. Do you feel you were given enough information about the procedure before the day of surgery?

 Yes  No  Don't know/not sure

3. Were you told before coming in that you may be discharged on the same day or by 7am the day following surgery?

 Yes  No  Don't know/not sure

4. Was your visit to the hospital as you expected?

 Yes  No  Don't know/not sure

5. Overall, how satisfied are you with your recovery since leaving hospital?

 Very happy  Happy  Not happy  Very unhappy

6. If a friend needed the same care, would you recommend Birmingham Women's Hospital?

 Highly likely  Undecided  No

Is there anything that would have improved your experience after you were discharged from hospital? Or is there anything we could do better? (please use the reverse side if you need more room)

.....

Thank you for taking the time to complete this survey, your feedback is really important to us.
 If you would be happy for us to contact you and find out more about your experience; please leave your name and email/phone number.....

Short stay hysterectomy pathway: Audit

Compliance with eligibility criteria

No Yes
 (If no: patient factor surgical factor discharge factor)

Peri-operative details

Time of surgery: Morning Afternoon
 Local anaesthesia: None Ports LTAP
 Low pressure: No Yes (meanmmHg)
 Pelvic drain: No Yes
 Surgical complication: No Yes
 (if yes: bleed >500mL Cystotomy Ureteric injury
 Bowel injury Other)

Immediate post-operative details

Patient diary: Not offered Declined Completed
 TWOC (1st): In theatre <6 hours >6 hours
 Re-catheterised: No Yes
 Home with catheter: No Yes
 Early fluids / diet: No Yes
 Opiates: No Yes
 Non-opiate analgesia: No Yes

Setting up Ambulatory Care in Gynaecology

ONCOLOGY

Oncology

- Colposcopy
- Vulvoscopy

Setting up Ambulatory Care in Gynaecology

UROGYNAECOLOGY

Urogynaecology

- Urodynamics
- Cystoscopy
- Botox
- Bulking agents
- Prolapse
 - Pessaries
 - Surgical repair



Setting up Ambulatory Care in Gynaecology

INFERTILITY

Infertility

- Scanning
- Egg collections
- Embryo transfers
- Trans-cervical, trans-myometrial
- Intrauterine insemination
- Sperm retrievals
 - PESA, TESA, TESE

Setting up Ambulatory Care in Gynaecology

QUALITY ASSURANCE

Quality assurance

- Important for patient care
- Important to justify the service
 - Outcomes
 - Gain more funding / resources
 - Expansion
- Sharing best practice and improving services individually, locally, and nationally

Outpatient procedures: Patient selection

QUALITY ASSURANCE

National hysteroscopy survey

Outpatient Hysteroscopy-Patient Satisfaction Survey BSGE LOGO

We would appreciate your comments on the service you received today to help improve our services. This data will also be used to compare our service with the results of others around the country; all data that is recorded by us or nationally is anonymous and untraceable. The answers you provide will be anonymous, completely confidential and your participation is voluntary. If you have any questions about this survey please ask a member of staff.

Thank you for your help

Before your consultation					
Did you receive any written information prior to your appointment? (e.g. leaflet)			Yes <input type="radio"/>	No <input type="radio"/>	
Did you feel that the information was clear and understandable?	Yes – I knew what to expect <input type="radio"/>	Yes – to some extent <input type="radio"/>	Not too sure <input type="radio"/>	No – wish I knew what to expect <input type="radio"/>	No – it was not useful <input type="radio"/>
Did you receive advice to take painkillers before the appointment?	Yes – took some <input type="radio"/>	Yes – did not take any <input type="radio"/>	No – wish I had <input type="radio"/>	No – no need <input type="radio"/>	
What did you think of the waiting area, reception and facilities?	Excellent <input type="radio"/>	Very Good <input type="radio"/>	Good <input type="radio"/>	Fair <input type="radio"/>	Poor <input type="radio"/>
About your consultation today					
Staff communicated things in a way I could easily understand.	Strongly Agree <input type="radio"/>	Agree <input type="radio"/>	Neither Agree or Disagree <input type="radio"/>	Disagree <input type="radio"/>	Strongly Disagree <input type="radio"/>
I was given the opportunity to ask questions.	Strongly Agree <input type="radio"/>	Agree <input type="radio"/>	Neither Agree or Disagree <input type="radio"/>	Disagree <input type="radio"/>	Strongly Disagree <input type="radio"/>
I was offered an opportunity to discuss pain relief.	Strongly Agree <input type="radio"/>	Agree <input type="radio"/>	Neither Agree or Disagree <input type="radio"/>	Disagree <input type="radio"/>	Strongly Disagree <input type="radio"/>
My questions were answered to my satisfaction.	Strongly Agree <input type="radio"/>	Agree <input type="radio"/>	Neither Agree or Disagree <input type="radio"/>	Disagree <input type="radio"/>	Strongly Disagree <input type="radio"/>
I felt involved in the decisions regarding my care.	Strongly Agree <input type="radio"/>	Agree <input type="radio"/>	Neither Agree or Disagree <input type="radio"/>	Disagree <input type="radio"/>	Strongly Disagree <input type="radio"/>
I was treated with respect and dignity.	Strongly Agree <input type="radio"/>	Agree <input type="radio"/>	Neither Agree or Disagree <input type="radio"/>	Disagree <input type="radio"/>	Strongly Disagree <input type="radio"/>
I was given enough privacy.	Strongly Agree <input type="radio"/>	Agree <input type="radio"/>	Neither Agree or Disagree <input type="radio"/>	Disagree <input type="radio"/>	Strongly Disagree <input type="radio"/>
All aspects of my care were dealt with confidentially.	Strongly Agree <input type="radio"/>	Agree <input type="radio"/>	Neither Agree or Disagree <input type="radio"/>	Disagree <input type="radio"/>	Strongly Disagree <input type="radio"/>
The staff were courteous and polite.	Strongly Agree <input type="radio"/>	Agree <input type="radio"/>	Neither Agree or Disagree <input type="radio"/>	Disagree <input type="radio"/>	Strongly Disagree <input type="radio"/>
I was told when I could expect to receive my results.	Strongly Agree <input type="radio"/>	Agree <input type="radio"/>	Neither Agree or Disagree <input type="radio"/>	Disagree <input type="radio"/>	Strongly Disagree <input type="radio"/>
I was given advice regarding follow-up.	Strongly Agree <input type="radio"/>	Agree <input type="radio"/>	Neither Agree or Disagree <input type="radio"/>	Disagree <input type="radio"/>	Strongly Disagree <input type="radio"/>
I was given advice regarding my recovery.	Strongly Agree <input type="radio"/>	Agree <input type="radio"/>	Neither Agree or Disagree <input type="radio"/>	Disagree <input type="radio"/>	Strongly Disagree <input type="radio"/>

Your experience (Considering your expectations of today's consultation)					
Did you feel pain?	Not at all <input type="radio"/>	Slightly <input type="radio"/>	Somewhat <input type="radio"/>	Mostly <input type="radio"/>	Constantly <input type="radio"/>
Did you feel in control?	Not at all <input type="radio"/>	Slightly <input type="radio"/>	Somewhat <input type="radio"/>	Mostly <input type="radio"/>	Constantly <input type="radio"/>
Did you feel uncomfortable?	Not at all <input type="radio"/>	Slightly <input type="radio"/>	Somewhat <input type="radio"/>	Mostly <input type="radio"/>	Constantly <input type="radio"/>
Did you feel embarrassed?	Not at all <input type="radio"/>	Slightly <input type="radio"/>	Somewhat <input type="radio"/>	Mostly <input type="radio"/>	Constantly <input type="radio"/>
Did you feel anxious?	Not at all <input type="radio"/>	Slightly <input type="radio"/>	Somewhat <input type="radio"/>	Mostly <input type="radio"/>	Constantly <input type="radio"/>
Did you feel faint?	Not at all <input type="radio"/>	Slightly <input type="radio"/>	Somewhat <input type="radio"/>	Mostly <input type="radio"/>	Constantly <input type="radio"/>

Your overall experience					
I am satisfied with the quality of care provided.	Strongly Agree <input type="radio"/>	Agree <input type="radio"/>	Neither Agree or Disagree <input type="radio"/>	Disagree <input type="radio"/>	Strongly Disagree <input type="radio"/>
I would recommend your service to friends and family.	Strongly Agree <input type="radio"/>	Agree <input type="radio"/>	Neither Agree or Disagree <input type="radio"/>	Disagree <input type="radio"/>	Strongly Disagree <input type="radio"/>
I would be happy to have this procedure again? (If needed).	Strongly Agree <input type="radio"/>	Agree <input type="radio"/>	Neither Agree or Disagree <input type="radio"/>	Disagree <input type="radio"/>	Strongly Disagree <input type="radio"/>

Please indicate (✓) what level of discomfort or pain you experienced on a scale of 0-10:										
0	1	2	3	4	5	6	7	8	9	10
No Pain			Moderate pain					Worst pain		

Please indicate (✓) what would be the worst level of discomfort or pain you might experience (or used to experience) during a period on the same scale of 0-10:										
0	1	2	3	4	5	6	7	8	9	10
No Pain			Moderate pain					Worst pain		

Please indicate (✓) How would you rate the care you received? On the same 0-10 scale:										
0	1	2	3	4	5	6	7	8	9	10
Bad			Neither good nor bad					Excellent		

Any further comments on your experience or suggestions for improvement?

Staff use only: (Please tick all that apply)	
Diagnostic Hysteroscopy +/- biopsy	<input type="checkbox"/>
Myomectomy	<input type="checkbox"/>
Hysteroscopic biopsy	<input type="checkbox"/>
Endometrial Ablation	<input type="checkbox"/>
Hysteroscopic polypectomy	<input type="checkbox"/>
Other (Please Specify)	<input type="checkbox"/>
Insertion/Retrieval of IUCD/Mirena IUS	<input type="checkbox"/>
Staff code	_____

Vaginoscopy versus vaginal instrumentation: Benchmarking data



Table 2. Surgical technique and outcomes for trial of vaginoscopy against standard hysteroscopy

	Vaginoscopy (n = 798) (%)	Standard technique (n = 799) (%)	Relative risk (95% CI)	P
Composite outcome				
Successful procedure*	647 (89)	621 (85)	1.05 (1.01–1.10)	0.01
Non-successful procedure	79 (11)	113 (15)	0.71 (0.54–0.92)	
Missing	72	65		
Procedure failures				
Cervical stenosis	33 (4)	8 (1)		
Pain	5 (0.6)	30 (4)		
Unable to access cervix	2 (0.3)	20 (3)		
Bleeding cervical mass	0 (–)	1 (0.1)		
Total failures	40 (5)	59 (7)	0.68 (0.46–1.00)	0.051
Acceptability				
Acceptable	785 (98)	777 (97)	1.01 (1.00–1.03)	0.1
Unacceptable	13 (2)	22 (3)		
Complications				
Vasovagal reactions	5 (0.6)	14 (2)		
Cervical trauma	0 (–)	2 (0.3)		
Admitted for analgesia	0 (–)	2 (0.3)		
Haemorrhage	0 (–)	1 (0.1)		
Total complications	5 (0.6)	19 (2)	0.26 (0.10–0.69)	0.007
Infection				
Antibiotics for urinary tract infection	13 (2)	9 (1)		
Antibiotics for vaginal discharge	8 (1)	5 (1)		
Offensive discharge	22 (3)	28 (4)		
Pelvic pain	142 (18)	132 (17)		
Pyrexia/fever	17 (2)	21 (3)		
Missing	81 (10)	73 (9)		
Total infections**	27 (3)	31 (4)	0.88 (0.53–1.46)	0.6

CI, confidence interval.

*Composite outcome of success defined as: no infection, no complications, complete procedure and acceptable level of pain. If patients had missing infection information but any other components indicated a procedure failure, these were classified as failure. When patients had the infection component missing but other components did not indicate failure, these cases were considered missing.

**Total infections defined as receiving antibiotics or at least two of the following: pelvic pain, offensive discharge and pyrexia/fever.

Ambulatory Care Network

INAUGURAL AMBULATORY CARE NETWORK (ACN) MEETING BIRMINGHAM 28-29TH MARCH 2019

Gynaecological interventions in the outpatient setting have evolved rapidly over the last decade and whilst they provide many advantages to women, clinicians and the wider health service, ambulatory care also presents challenges and uncertainties. We present a series of 8 interactive sessions introducing key themes and controversies in ambulatory gynaecology, important for those involved in managing women's health in the outpatient setting – hospital doctors, nurses and GP specialists.

Themes: 1. Purpose and goals of the ACN 2. Optimising the patient experience 3. Clinical management 4. Implementing services 5. Latest evidence and guidelines 6. Training 7. Quality assurance 8. Research

Venue: Crowne Plaza Hotel, Birmingham City Centre

Cost: £50 for meeting only (includes lunch on both day and 3 course networking evening meal); £90 for meeting and accommodation

For a detailed agenda and information on how to register, please visit
<https://www.bsge.org.uk/bsge-ambulatory-care-network-inaugural-meeting/>



BSGE Surgical Information Collection System



Hysteroscopic myomectomy

DATA CAPTURE– BSGESICS

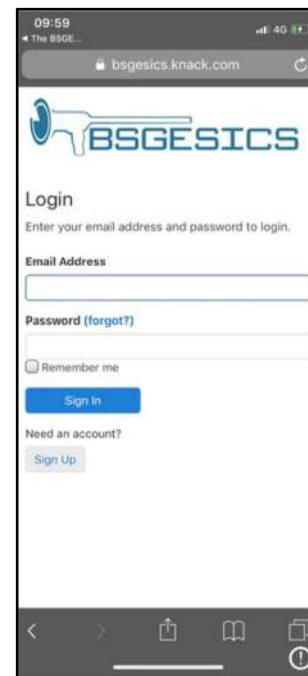
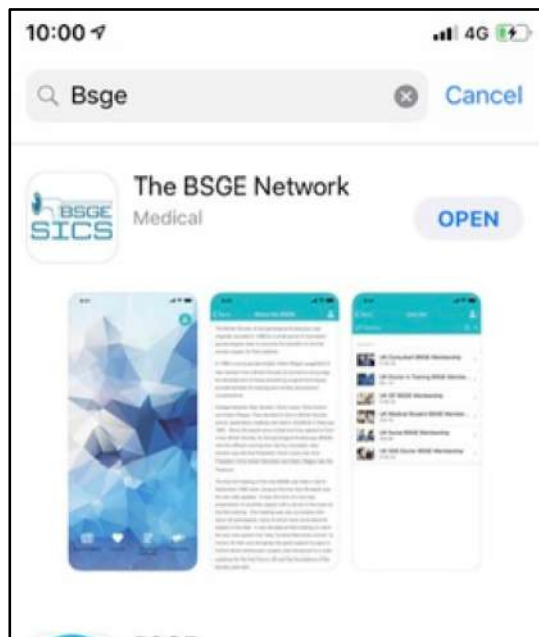
[HTTPS://WWW.BSGESICS.COM/](https://www.bsgesics.com/)

OR VIA THE BSGESICS APP

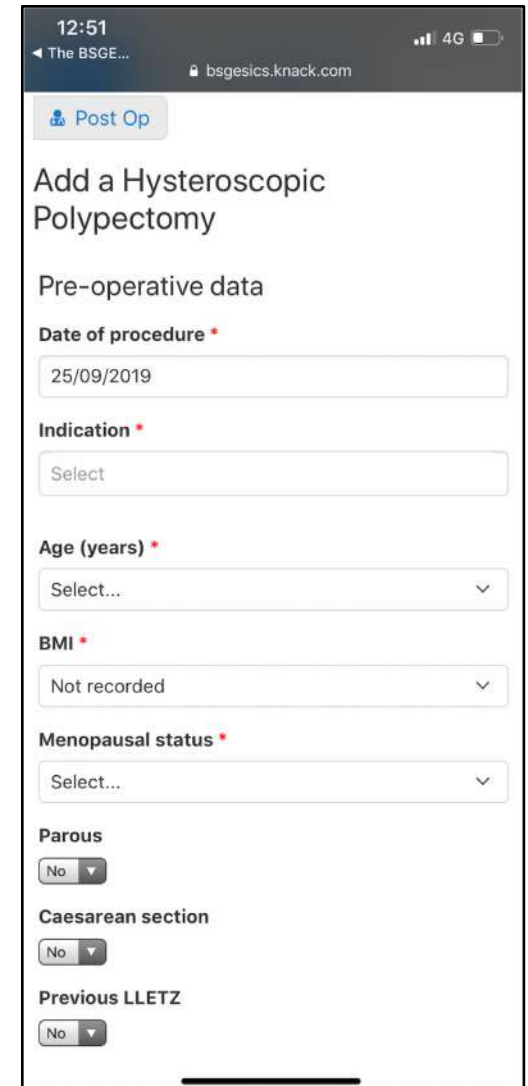
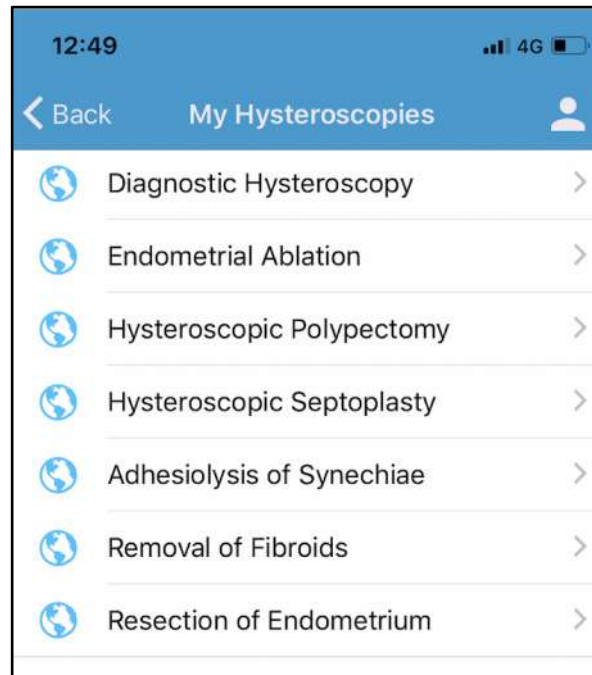
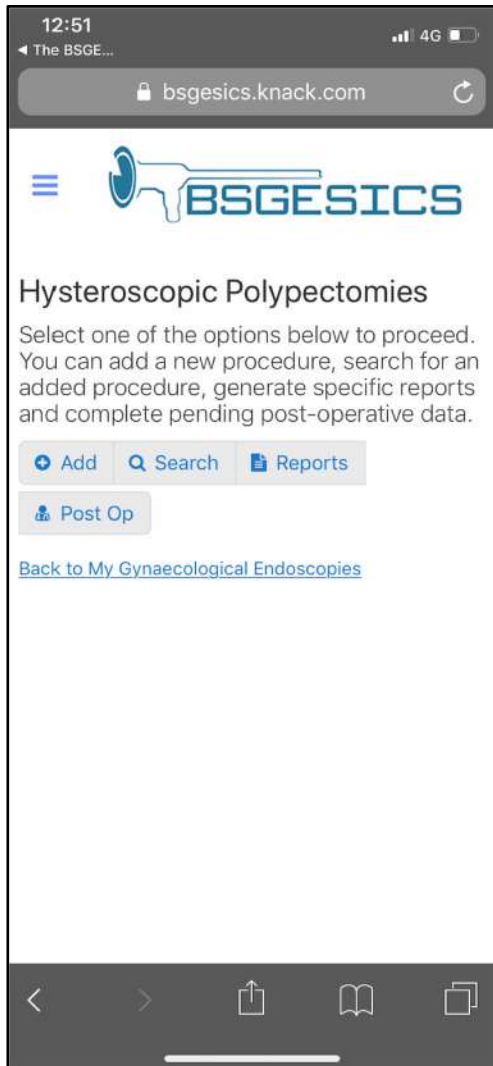
Hysteroscopic skills:

Surgical information collection system (BSGE)

- Electronic data capture for common hysteroscopic (and laparoscopic) procedures
 - Individual
 - Comparative
- Will work on any platform (smart phones, tablets, computers)
 - Shortly to go live at <http://bsgesics.com> and availability of an app



Data collection: BSGESICS



Setting up Ambulatory Care in Gynaecology

CONCLUSION

Conclusion

- The aim of the service should be to provide efficient, safe, convenient, effective investigation and treatment associated with high levels of patient satisfaction
 - The better thing to do NOT the cheaper thing to do
- Have a vision
 - What services do you want to offer and where?
 - Business plans
- Success requires:
 - Follow best practice and evidence
 - Focus on patient information giving and patient experience
 - Ensuring correct infrastructure including staffing and recovery areas
 - Use of the best technologies
 - Miniaturisation and portability
 - Training
 - Case-load
 - Quality assurance
 - Collaboration to share experience / BSGESICS / BSGE Patient survey (national audit)

Building a Successful OPH Clinic



Building a Successful OPH Clinic



Building a Successful OPH Clinic



T Justin Clark MD (Hons) MRCOG, Birmingham Women's Hospital

ACKNOWLEDGMENTS

- Dr MH Emanuel for the videos of intrauterine adhesions and removal of placental remnant

