Lecture 5:
Out Patient Hysteroscopy

BSGE Approved Course
Dubai
Nov 2006

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Topics for discussion

- Background
- Setting up service
- Hysteroscopy
  - Diagnostic
  - Operative
- Audit of an OP hysteroscopy service
- Service development
- Conclusions
Background

- OP hysteroscopy for >10 years

- Many OP hysteroscopy units but few are genuinely, one stop, see & treat

- Types of instrument used
  - Rigid scopes
  - Flexible fibre optic scopes
  - Versascopes
Background

- **RCT: TV USS + OP hysteroscopy v GA Hysteroscopy + D & C**
  - OP hysteroscopy well tolerated (n=400)
    - Tahir et al Southmead Bristol BJOG 1999

- **RCT: OP Hysteroscopy v Day Case Hysteroscopy**
  - Patient satisfaction equally acceptable (n=100)
    - Kremer et al St James Leeds BMJ 2000
OP Hysteroscopy
Improves accuracy of TV USS diagnosis

- **Endo > 4.0mm TV USS Loizzi J AAGL 2000**
  - Endometrial pathology in 28% of 155 women (23 polyps, 12 hyperplasia, 8 submucous fibroids)

- **Endo < 4.0mm TV USS Marcello J AAGL 2000**
  - Endometrial pathology in 10% of 212 women (16 polyps, 4 submucous fibroids)
AIMS

- Women with abnormal vaginal bleeding
- One stop diagnosis & treatment clinic
- Seamless access to scanning and hysteroscopy
- Reduction in waiting times
- Reduction in day case / in patient theatre
- Improved communication with primary care
Staffing

- Consultant delivered service
- Nursing support - vital
- Clerical Staff
- Junior staff (supranumery)
  - SHO’s, SpR’s
Appointments

- 5 patients per session
- 45 minute slots
- Seen within 4 weeks of referral
- 1 slot reserved for urgent referrals
Information

- Information booklet sent at time of appointment being made

- Instructions re premed analgesia (NSAIDS [paracetamol if asthmatic/gastric problems])
  - Nagele et al 1997 BJOG (Mefanamic acid)

- Suggested that patients come with friend / relative and take few hours off work
Referrals

- Appropriate referrals accepted from
  - GP’s
  - Consultant clinics

- Ultimately, referrals will be made via Electronic booking (“Book & Go”)

- Letters vetted by consultant
  - Inappropriate referrals diverted to GOPD
Referral Criteria

Pre / perimenopausal

- Menorrhagia (not responding to 3 months of medical therapy)
- Intermenstrual bleeding
- Persistent BTB on OCP / HRT
Referral Criteria

Postmenopausal

- PMB (mainly rapid access clinic)

- BTB on HRT
  - >3/12 BTB on sequential HRT
  - >6/12 bleeding on continuous combined
  - New bleeding on continuous combined HRT after >/= 1 year amenorrhoea
Referral Criteria

Inappropriate referrals

- Complications of early pregnancy
- Menorrhagia with no attempt at medical therapy
- BTB on HRT / contraceptives where manipulation of regimen has not been attempted
- Early appointment service for other gynaecological problems
OP Hysteroscopy

Problems

- **Staff & Space**
  - No dedicated time for junior staff to train

- **High set up costs**
  - Cost effective in long term by avoiding GA/IP stay

- **Health & Safety Rules**
  - Versascopes / flexible scopes not autoclavable
  - Containers specially made for instruments

- **Difficult to predict length of operative procedure**
  - Implications for appointment times
Visit Details

- **Assessment**
  - History, Examination, Smear, Pipelle (post hysteroscopy)

- **Scanning**
  - Transvaginal route

- **Hysteroscopy**
  - Diagnostic
  - Therapeutic
Scanning

- Toshiba US machine with TV probe

- If endometrium >4mm proceed to hysteroscopy*

*Bakour et al 1999 Acta Obstet Scand
Hysteroscopy

- Bettocchi operative hysteroscopy system (Storz)

- 2.9mm & 2.0mm (mini) rigid scopes
  - Hopkins rod lens system (excellent optics)

- Diagnostic
  - 3.7mm single flow sheath
  - Distension medium - normal saline
  - Pressure – 75mmHg (max)
Hysteroscopy

- Camera
  - Imaging:
    - Storz single chip camera
    - Sony monitor

- Light source
  - Storz xenon light

- Recording equipment
  - Sony digital video recorder
  - Direct (i-link) to Sony Vaio laptop computer
  - Downloading & archiving of still and motion images
Hysteroscopy

- Analgesia
  - Premed
    - Ibuprofen, Mefanamic acid, Paracetamol

- Cervix
  - Xylocaine spray through disposable nozzle to cervical canal (3 sprays; 30mg base xylocaine)

  - No tenaculum (Vaginoscopy possible)

- Post op
  - Paracetamol
Hysteroscopy

- Vaginoscopy
  - Stefano Bettocchi JAAGL 1997
    - 1200 hysteroscopies
    - 680 vaginoscopic approach
    - Reduced discomfort
    - No additional complications
OP Diagnostic Hysteroscopy – entry into Cx Canal without dilation
OP Diagnostic Hysteroscopy – distension of Cx Canal with saline
OP Diagnostic Hysteroscopy – normal cavity
OP Diagnostic Hysteroscopy – endometrial polyps
OP Hysteroscopy – type 1 submucous fibroid
Hysteroscopy

Operative

- 4.3mm single flow oval operating sheath
- 4.9mm dual flow oval sheath
- 5 French gauge semi-rigid instruments
  - Scissors – blunt & sharp
  - Biopsy forceps – spoon & punch
  - Graspers
  - Polypectomy loop (monopolar)
  - Myoma fixation screw
Operative OP hysteroscopic procedures

- Endometrial biopsy
- Polypectomy
- IUCD retrieval
- Division of synechiae & septae
- Hysteroscopic myomectomy
- Hysteroscopic Sterilisation
OP Hysteroscopy – polyp
Semi - rigid 5F gauge biopsy forceps
OP Hysteroscopy – posterior wall polyp removal 1: Semi-rigid 5F gauge scissors
OP Hysteroscopy – posterior wall polyp removal 2: Semi - rigid 5F gauge scissors
OP Hysteroscopy – posterior wall polyp
removal 3: Semi - rigid 5F gauge scissors
OP Hysteroscopy – rt cornual polyp
OP Hysteroscopy – cornual polyp
Semi-rigid 5F gauge scissors
Patient Satisfaction in a ‘See and Treat’ Outpatient Hysteroscopy Clinic

Cloke B.T. & Panay N.

BSGE Poster
Sheffield 2006
Patient Satisfaction in a ‘See and Treat’ Outpatient Hysteroscopy Clinic

- 566 patients attended clinic between May 2001 and Nov 2005

- Mean age 41y (Range 19 – 91)

- 396 (69.9%) were hysteroscoped

- 65.8% diagnostic v 34.2% operative

- 228 questionnaires retrieved from hysteroscoped patients
Reasons for referral

- No reason
- Abnormal uterine bleeding
- PCB
- PMB
- BTB
- Abnormal imaging
- Cervical polyp
- Other
Reasons why not hysteroscopied

- Thin endometrium
- Patient request / unable to tolerate
- Raised BMI
- Medical reason
- Other
Patient Satisfaction in a ‘See and Treat’ Outpatient Hysteroscopy Clinic

- 92.5% would have had same procedure again

- 10% would have preferred the same procedure under a general anaesthetic

- Median VAS pain score 26 (range 0 – 100)
Patient Satisfaction in a ‘See and Treat’ Outpatient Hysteroscopy Clinic

- Median VAS scores
  - Pre Menopausal VAS 26 (0-93) v Perimenopausal VAS 21 (0-72) v Post Menopausal VAS 32 (0-100) (p=0.007 peri v post)
  - Nulliparous VAS 17 v Parous VAS 27 (p=0.24)
    - But ? Vag deliveries
  - Diagnostic VAS 27 v Operative VAS 23 (p=0.31)
RESULTS - Median VAS Scores

- All patients - VAS = 26 (range 0-100)
- Menopausal status
  - premenopausal - VAS 26 (range 0-93)
  - perimenopausal - VAS 21 (range 0-72)
  - postmenopausal - VAS 32 (range 0-100)  \( p=0.007 \)
- Parity - Nulliparous VAS = 17 and Parous median VAS = 27 (p=0.24)
- Hysteroscopy - Diagnostic VAS = 27 and Operative VAS = 23 (p=0.31)
Patient Satisfaction in a ‘See and Treat’ Outpatient Hysteroscopy Clinic

- Complications
  - 6 (1.5%) vasovagal episodes (no atropine required)
  - 2 (0.5%) pelvic sepsis
  - 0 perforation
  - 0 fluid overload
Patient Questionnaire

- 216 patients left positive feedback!
  - 38.4% reassurance and explanation by staff
  - 15.7% quick procedure
  - 12.0% immediate result
  - 10.7% visual aid of monitor
  - 9.7% overall good procedure
  - 8.3% avoids general anaesthetic
  - 5.2% painless

  ‘A very positive experience’
Patient Questionnaire 4

- Worst Aspects
  - ‘Period type pain and discomfort’
  - ‘Stirrups’
  - ‘Gynaecological examinations are always unpleasant’
Patient Satisfaction in a ‘See and Treat’ Outpatient Hysteroscopy Clinic

Conclusions of audit

- Patient satisfaction was high and pain scores were low agreeing with published data
- Postmenopausal women appear to experience more pain – differential management
- Pain experienced between diagnostic and operative procedures was similar....
- This strengthens argument for proceeding to operative procedures in the OP setting without distinction between diagnosis and treatment
OP Hysteroscopy

future service development

- **Nursing**
  - Nurse hysteroscopy
    - Clinical nurse specialist
    - Bradford course

- **Training**
  - Currently provide opportunity for juniors to attend
  - Formal RCOG/BSGE recognised courses for GPSI’s (Sipra Guha Perivale), hospital doctors & nurses

- **Clinical**
  - Versapoint technology to complement Bettocchi system
  - ESSURE
  - OP endometrial ablation
    - Novasure
    - Thermachoice balloon ablation
OP Hysteroscopy
Use of disposables with rigid systems

- Versapoint bipolar technology
  - Polyps
  - Fibroids
  - Synechiae

- Essure system
  - Hysteroscopic sterilisation
OP Hysteroscopy
Use of disposables with rigid systems

- Bettocchi et al HR 2002

- Advanced operative office hysteroscopy without anaesthesia:
  - 501 cases treated with 5 Fr bipolar electrode
    - Endometrial polyps 0.5-4.5cms
    - Submucosal/intramural 0.6-2.0cms
  - Up to 79.3% without discomfort
OP Hysteroscopy

Use of disposables with rigid systems

- Essure Hysteroscopic sterilisation
  - Valle et al Fertil Steril 2001
    - 33 women undergoing TAH
    - HSG’s and histology confirmed tubal occlusion

- Kerin et al ANZJ ObGyn 2001
  - 1894 women months – no pregnancies

- Now > 50000 cases worldwide
  - 14000 in Europe
OP Hysteroscopy
Use of disposables with rigid systems

- Essure Hysteroscopic sterilisation
  - Effectiveness 99.74% at 5 years

- Av procedure time 8-10mins

- Unable to place devices in 2% of patients
  - Kerin J AAGL 2004
OP hysteroscopy - Essure

- Video
OP Hysteroscopy
Future service development

- Information technology
  - Direct electronic booking (Book & Go)
  - Direct data entry onto electronic proforma (Infoflex / ICHIS)
  - Protocol & Referral guidelines on Website

- Access of information
  - HHNT (Intranet)
  - Primary care (NHS net)
  - Patients (Internet)
OP Hysteroscopy
Conclusions

- Procedure generally well tolerated by patients
- Most patients prefer LA to GA given choice
- Cost effective in long term
OP Hysteroscopy

Acknowledgements

- Nursing
  - Sister Cheryl Rothon

- Medical
  - Dr’s Brianna Cloke, Aarthi Mohan, Rachel Simcox, Jo Hockey (Audit)
Thank you for your attention!