State-of-the-art flexible hysteroscopy for office gynecologic evaluation

Bradley L D, Widrich T

Record Status
This is a critical abstract of an economic evaluation that meets the criteria for inclusion on NHS EED. Each abstract contains a brief summary of the methods, the results and conclusions followed by a detailed critical assessment on the reliability of the study and the conclusions drawn.

Health technology
Diagnostic flexible hysteroscopy without anesthesia, cervical dilatation or paracervical block.

Type of intervention
Primary prevention; diagnosis.

Economic study type
Cost-effectiveness analysis.

Study population
Women with either abnormal uterine bleeding, lost intrauterine devices, or abnormal findings on ultrasound or infertility.

Setting
Hospital (Tertiary outpatient). The economic study was performed in Cleveland, Ohio, USA.

Dates to which data relate
The main effectiveness data were collected between February 1992 and December 1993. Resource and cost data were mainly derived from a clinical trial and institutional data. Resources were measured in 1994 values.

Source of effectiveness data
Effectiveness data were derived from a single study.

Link between effectiveness and cost data
The costing was undertaken retrospectively on the same patient sample as that used in the effectiveness study.

Study sample
The study sample was 417 women (339 premenopausal, 78 postmenopausal) with either abnormal uterine bleeding, lost intrauterine devices, or abnormal findings on ultrasound or infertility. Patients' ages ranged from 16 to 84 years (mean 41.6 years). Hysteroscopy could not be completed in 29 patients (7%) because of cervical stenosis, pain or excessive bleeding.

Study design
Case series.
Analysis of effectiveness
The main outcomes were the estimated level of pain (scale of 1-5) and the side-effects experienced during office hysteroscopy.

Effectiveness results
Pain ratings obtained from 387 patients were as follows:

(level 1) easily acceptable discomfort, minimal discomfort during procedure (34.5%);
(level 2) acceptable discomfort, uncomfortable but easily bearable (22.2%);
(level 3) tolerable discomfort, equivalent to menstrual cramps and spasms (27.4%);
(level 4) barely tolerable pain, tolerable for short time only (12.4%);
and (level 5) intolerable pain, severe enough to stop the procedure before completion (3.6%).

The median pain rating was 2, representing an acceptable level of discomfort. Complications after office hysteroscopy were rare; there was a single adverse event of post-procedure temperature elevation.

Clinical conclusions
Flexible office hysteroscopy without anesthesia is well tolerated by the majority of women.

Measure of benefits used in the economic analysis
The measures of benefits were pain, complications and duration of the procedure.

Direct costs
Quantities and costs were not analysed separately. Only health service costs were considered: office hysterectomy and diagnostic hysterectomy (performed under anesthesia). Costs for office hysteroscopy were compared to an average of 30 diagnostic hysteroscopies performed under anesthesia by another physician. Discounting was not deemed necessary as the duration of the study was less than a year.

Statistical analysis of costs
Not performed.

Indirect Costs
Not included.

Currency
US dollars ($).

Sensitivity analysis
No sensitivity analysis was performed.

Estimated benefits used in the economic analysis
The median pain rating was 2 (representing an acceptable level of discomfort) and the average duration of the
procedure was 5 minutes.

**Cost results**
The charge for office hysteroscopy was $475. The charges of the 30 diagnostic hysteroscopies performed under anesthesia ranged from $2,355 to $4,635 (mean $3,495).

**Synthesis of costs and benefits**
The costs and benefits were not combined.

**Authors' conclusions**
The authors conclude that diagnostic flexible office hysteroscopy without anesthesia is well tolerated by the majority of women, and is far less expensive and time consuming than hysteroscopy performed in an operating room.

**CRD COMMENTARY - Selection of comparators**
A justification was given for the comparator used and it appears to represent a variation of usual practice. You, as a user of this database, should consider whether this is an appropriate comparator in your own setting.

**Validity of estimate of measure of benefit**
The study was based on a case-series, which provided descriptive information for the office hysterectomy only. A more reliable assessment of the relative benefits of both office and diagnostic hysteroscopies through hypothesis testing, may come from a randomised controlled trial.

**Validity of estimate of costs**
Insufficient details were provided of the source and nature of the costs included. Costs were only from the perspective of the health service and excluded costs experienced by others in society such as patients.

**Other issues**
The cost data may not be generalisable to other countries.

**Source of funding**
None stated.

**Bibliographic details**

**PubMedID**
9050568

**Indexing Status**
Subject indexing assigned by NLM

**MeSH**
Adolescent; Adult; Aged; Aged, 80 and over; Ambulatory Care /economics; Constriction, Pathologic /physiopathology; Cost-Benefit Analysis; Costs and Cost Analysis; Dilatation and Curettage /economics; Equipment Design; Female; Fever /etiology; Gynecology; Hospital Costs; Humans; Hysteroscopes; Hysteroscopy /adverse effects /economics
methods; Leiomyoma /diagnosis; Middle Aged; Office Visits /economics; Pain /etiology; Pain Measurement; Patient Satisfaction; Pliability; Polyps /diagnosis; Safety; Time Factors; Uterine Cervical Diseases /physiopathology; Uterine Hemorrhage /physiopathology; Uterine Neoplasms /diagnosis

AccessionNumber
21995001116

Date bibliographic record published
31/03/1999

Date abstract record published
31/03/1999