Outpatient haemorrhoidectomy under local anaesthesia
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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
Outpatient haemorrhoidectomy under local anaesthesia.

Type of intervention
Treatment; Anesthesia.

Economic study type
Cost-effectiveness analysis.

Study population
Patients undergoing haemorrhoidectomy.

Setting
Secondary care, outpatient and inpatient departments. The economic study was conducted in Belo Horizonte, Brazil.

Dates to which data relate
No dates were stated.

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

Link between effectiveness and cost data
Costing was undertaken retrospectively on the same patient sample used in the effectiveness study.

Study sample
Power calculations were not used to determine sample size. 50 patients with haemorrhoidal disease that required surgical treatment and who agreed to undergo outpatient haemorrhoidectomy under local anaesthesia were studied prospectively (study group) and were compared with a group of 50 patients who had undergone inpatient haemorrhoidectomy (historical group). All patients were operated on in the same hospital division, under the supervision of the same surgical team. Criteria for inclusion in the study group were: patients should live in the town, with other people or family members who could look after them during the postoperative period, patients should have transport to and from the hospital and a contact telephone number in case of an emergency. No patients with complicated systemic disease were included. One patient from the study group was withdrawn from the study due to hypertension and was subsequently lost to follow-up.
Study design
This was a non-randomised controlled trial with historical controls carried out in a single centre. The mean duration of follow-up for the study group was 5.4 months and for the historical group was 4.7 months. Three patients were lost to follow up in the study group.

Analysis of effectiveness
Analysis of effectiveness was based on intention to treat. The main health outcomes used in the analysis were early postoperative complications and late complications. The patients were also given 2 visual analogue scales: one for measuring the intensity of pain from the day of the operation until the fifth postoperative day (ranging from 0 - no pain, to 4 - excruciating pain) and a home performance scale (ranging from 0 - bedridden to 3 - unrestricted home activities). There were no differences in age and sex between the two groups (p=0.085 and 0.23, respectively).

Effectiveness results
The early postoperative complications were as follows, for the historical versus the study group: no complications (24 patients versus. 36, p=0.02);severe pain (7 versus 12, p=0.30);bleeding (1 versus 2);urinary retention (18 versus 1, p=0.0001);infection (0 versus 0);faecal impaction (0 versus 1). Late complications were as follows, (historical versus study group): skin tags (21 versus 17, p=0.70);fissure (3 versus 2, p=1.0);fistula ( 1 versus 1);stenosis (0 versus 1);anal incontinence (2 versus 1). 42 patients (84%) of the study group were completely satisfied with their treatment and 45 (90%) achieved normal home activities from the third postoperative day.

Clinical conclusions
Outpatient haemorrhoidectomy under local anaesthesia is a safe procedure.

Measure of benefits used in the economic analysis
The authors did not provide any measure of benefits.

Direct costs
Health service costs were considered, such as the cost of the operating room for haemorrhoidectomy, including medical and surgical equipment and supplies, and the patient-day costs. Cost data were obtained from the financial department of the hospital. Costs and quantities were not reported. Discounting was not applied because of the short duration of the study. No price dates were given.

Statistical analysis of costs
Not performed.

Indirect Costs
Not considered.

Currency
US dollars ($).

Sensitivity analysis
Not performed.

Estimated benefits used in the economic analysis
Cost results
The mean estimated costs were $313.6 for outpatient and $716 for inpatient treatment.

Synthesis of costs and benefits
Not applicable.

Authors' conclusions
Outpatient haemorrhoidectomy under local anaesthesia was safe and comfortable for most patients, with complication rates comparable to or better than those observed after inpatient treatment and lower costs.

CRD COMMENTARY - Selection of comparators
reason for the choice of the comparator (inpatient haemorrhoidectomy) is clear, as it was widely used in the authors' setting. You, as a database user, should consider if this is applicable to your own setting.

Validity of estimate of measure of benefit
internal validity of the results cannot be reasonably assured due to the lack of randomisation. The sample size may have been insufficient to detect differences between the two procedures.

Validity of estimate of costs
costing methodology is presented in detail, but costs and quantities were not reported separately. Costs to patients and their families should have been considered.

Other issues
ts may not be generalisable to other settings or countries. A societal perspective of the economic analysis, considering costs to patients and others in society, might have provided different results in the analysis. The authors made appropriate comparisons with other studies.

Implications of the study
If ethical, the cost-effectiveness of outpatient haemorrhoidectomy under local anaesthesia should be assessed in a well designed randomised controlled trial.

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