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
Surgical treatment of inguinal hernias.

Type of intervention
Treatment.

Economic study type
Cost-effectiveness analysis.

Study population
Patients (between 22 and 72 years old), presenting with symptoms of unilateral or bilateral inguinal hernia.

Setting
Hospital. The economic study was carried out in Romania.

Dates to which data relate
The effectiveness and cost data were collected in 1994. The price year was not stated.

Source of effectiveness data
The evidence for final outcomes was derived from a single study.

Link between effectiveness and cost data
Costing seems to have been undertaken on the same patient sample as that used in the effectiveness study.

Study sample
Power calculations were not used to determine the sample size. The first 50 patients having laparoscopic herniorraphy (group A) and 50 patients having the classical repair (group B) since September 1994 were included in the sample. In group B, 38 patients had a Bassini repair and 12 had Fruchaud repair.

Study design
The study was a single centre, non-randomized controlled trial with concurrent controls. The follow up period was between 2 and 18 months.
Analysis of effectiveness
The analysis of effectiveness was based on intention to treat. The primary health outcomes used in the analysis were morbidity related to the procedure, early recurrence rate, operative time, amount and type of analgesia required postoperatively, and interval before returning to full activity. Groups were shown to be similar in terms of their demographic and prognostic features.

Effectiveness results
The results in the two groups were not significantly different (p <0.05). The median operative time for unilateral hernias in group A was 70 (+/- 12) minutes versus 40 (+/- 12) minutes in group B. Patients in group A received postoperative antiallergic medication in a significantly smaller quantity (1 f. Mialgin and 6 f. Algocalmin) in the 3 days of hospitalization compared to the patients in group B (2 f. Mialgin and 15 f. Algocalmin) in their 7 days of hospitalization. Postoperative morbidity was 4 for group A, and 7 for group B. The average hospitalization time was 3.8 days for group A and 7.7 days for group B. The time required by group A to return to work was significantly shorter (7 (+/- 3) days) compared to group B (25 (+/- 10) days). No recurrent hernias were found in patients from either group during the follow-up, which was 2-18 months for the two groups

Clinical conclusions
The laparoscopic technique for the repair of inguinal hernias may be sufficiently safe when undertaken by a very experienced laparoscopist, although it is not without risk. According to the study, these risks were no higher than those for the conventional method using open surgery. The intraoperative risks were lesions of the epigastric vessels, of the spermatic girdle or of the bowel.

Measure of benefits used in the economic analysis
The authors did not produce a summary measure of benefit within the economic evaluation.

Direct costs
Only hospital costs were included. The method of measuring and valuing costs was not specified by the authors. Resource quantities were not reported.

Statistical analysis of costs
Student's t-test was used to estimate confidence intervals.

Indirect Costs
Not included in the analysis.

Currency
Not stated. Cost results were reported as proportions only.

Sensitivity analysis
No sensitivity analysis was carried out.

Estimated benefits used in the economic analysis
Not applicable.

Cost results
The daily cost of hospital care of group A patients exceeded that of group B by approximately 1.7 times.

**Synthesis of costs and benefits**
Not applicable.

**Authors' conclusions**
The authors concluded the high cost of the laparoscopic method rendered its large scale use questionable.

**CRD COMMENTARY - Selection of comparators**
The reason for the choice of the comparator is clear. You, as a database user, should consider if this applies to your own setting.

**Validity of estimate of measure of benefit**
As the study lacked randomisation and sensitivity analysis, the results need to be treated with some caution. A more reliable assessment of the relative benefits would come from a randomized controlled trial.

**Validity of estimate of costs**
No details were provided of the source and nature of the costs included. We cannot judge whether there are any important cost items omitted from the study because of lack of adequate information about the cost estimation methods used in the study.

**Other issues**
The issue of generalisability to other settings or countries was not addressed. No comparison was made with other studies.

**Implications of the study**
Some further research is required to establish the relative effect which the learning curve might have on the operative time.

**Source of funding**
None stated.

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