Biliary lithotripsy versus cholecystectomy: a cost-utility analysis
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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
Biliary lithotripsy and oral chemolysis therapy (ursodeoxycholic acid).

Type of intervention
Treatment.

Economic study type
Cost-utility analysis.

Study population
The sample was stratified by: males, aged 30-60, aged 70, aged 80 or aged 90, with gallstones (less or equal to 20mm diameter) and females, aged 30-60, aged 70, aged 80 or aged 90, with gallstones (less or equal to 20mm diameter).

Setting
The study was carried out in the USA.

Dates to which data relate
It seems that price related to 1989.

Source of effectiveness data
Single study.

Modelling
Epidemiological cohort model (model of survival and disease).

Measure of benefits used in the economic analysis
Quality-adjusted-life-years (QALYs). The Quality of Well-being Scale was used for the health state description and as a basic method of the valuation of health states. Clinician values were used to assess the health states.

Direct costs
Direct costs were to the health service and included: hospital charges, professional fees, drug, and laboratory charges. It seems that price information related to 1989.

Indirect Costs
Production losses were also considered.

Currency
US dollars ($).

Sensitivity analysis
Sensitivity analysis was carried out using the methods of single parameter variation and multi parameter variation.

Estimated benefits used in the economic analysis
Incremental QALYs (discounted at 5%) for: male, age 30-60, gallstones <= 20mm diameter, were 0.75; male, age 70, gallstones <= 20mm diameter, were 0.81; male, age 80, gallstones <= 20mm diameter, were 0.81; male, age 90, gallstones <= 20mm diameter, were 0.81; female, age 30-60, gallstones <= 20mm diameter, were 0.75; female, age 70, gallstones <= 20mm diameter, were 0.81; female, age 80, gallstones <= 20mm diameter, were 0.81; female, age 90, gallstones <= 20mm diameter, were 1.00. Outcome duration was 5 years. Treatment side-effects were included.

Synthesis of costs and benefits
Cost duration was 5 years. Across all strata the intervention was the dominant strategy (costs and benefits discounted at 5%).

CRD Commentary
(This commentary was not written by CRD, but by the authors of the DH Register.) 1) The benefits are truncated at five years, the quality of data used in the model is uncertain. 2) Values attached to health states are unreported. 3) The values investigated in the sensitivity analysis were not adequately justified. 4) There were no health omissions.

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