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Title:	COST-EFFECTIVENESS COMPARISON OF TENSION-FREE MESH REPAIR VS. TENSION SUTURE REPAIR METHODS OF INGUINAL HERNIA IN HUNGARY
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OBJECTIVES:The objective of this study was to compare the cost-effectiveness of tension-free mesh and tension suture methods of inguinal hernia repair in Hungary, from hospital and payer perspectives.

METHODS: Cost effectiveness of open mesh vs. open non mesh was modeled with a Cohort Markov model. Model simulation runs in yearly cycles up to 15 years. Transition probabilities were derived from systematic review and other published sources. Costs were collected from two hospitals and from the payer in Hungary. Utility values were extracted from the published sources. Both costs and outcomes were discounted annually at 5%. In probabilistic sensitive analysis simulations were repeated 10,000 times. CEAC curves were generated as a result of simulation for all scenarios.

RESULTS:Over a 5 and 15 year period open mesh provides greater benefits in terms of more QALYs and fewer recurrences at a cumulatively higher cost than open non mesh procedures. Cost per one additional QALY is 13,221 in a 5 years time horizon and 2819 in a 15 years time horizon from a payer perspective. Cost per one recurrence avoided is 885 in a 5 years time horizon and 173 in a 15 years time horizon from payer perspective. When the costs from a hospital perspective are used the open mesh option is the dominant technology over the open non mesh option. Results in the probability sensitivity analysis are very similar to deterministic analysis. In the five year perspective open mesh is the more cost effective option in comparison to open non mesh option when the value for society's willingness to pay for a QALY exceeds 6000 (700 in the 15 years perspective).

CONCLUSION: Findings suggest open mesh hernia repair method as a very cost effective therapy from both hospitals and payer perspectives for the inguinal hernia treatment in Hungary.