

One-stop-surgery

An efficient and effective innovation in paediatric inguinal hernia repair

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Introduction

- Day-care surgery in children requires two to four separate hospital visits.
- A “one-stop-surgery” treatment system consolidates care into a single hospital visit and offers full treatment in one day.

Aim Evaluation of the effectiveness and efficiency of paediatric inguinal hernia repair after implementation of a one-stop-surgery system

1 day

Outpatient clinic (paediatric surgery) → Preoperative screening (anaesthesiology) → Operation

Methods

Design	Prospective observational trial
Population	Children (3 months - 18 year) with inguinal hernia, ASA I-II
Intervention	One-stop-surgery (OSS)
Control	Regular day-care treatment (Control)

Primary outcome measures: Effectiveness & efficiency

Secondary:

- Satisfaction of parents (*PedsQL Healthcare Satisfaction questionnaire*)
- Health care related costs (*iProductivity Cost Questionnaire*)

**One-stop-surgery in children increases
treatment efficiency and parental
satisfaction
&
decreases health care and productivity
costs**



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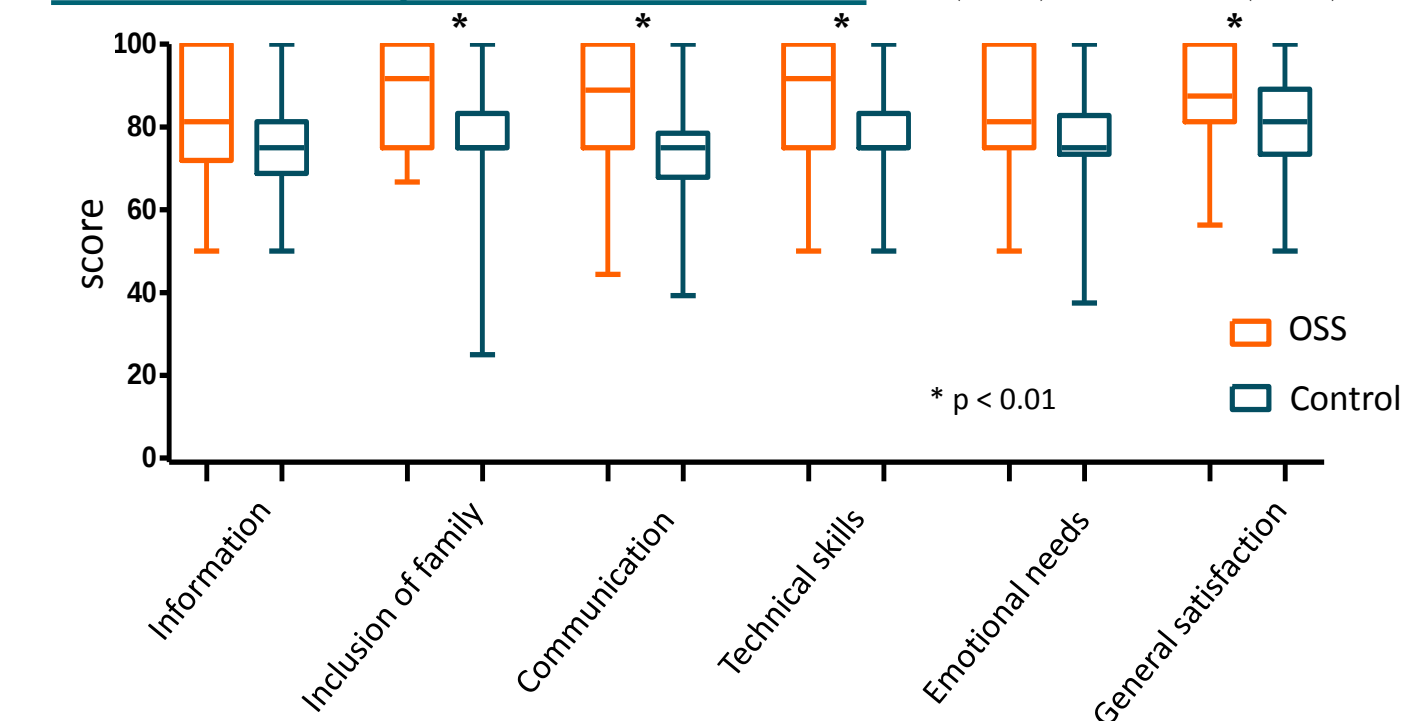
Results

OSS group: 55.6% male, median (IQR) age: 5 (3-6) year

Similar effectiveness but increased efficiency

Outcome	OSS (n=54)	Control (n=37)	p-value
Complications, n (%)	1 (1.9)	1 (2.7)	1.000
Recurrence rate, n (%)	0 (0)	1 (2.7)	0.407
Discharge <1 day, n (%)	53 (98.1)	36 (97.3)	1.000
Time to surgery, median (IQR), days	49 (34.8-63.8)	55 (26.5-69)	0.987
Hospital visits, median (IQR), n	1 (1-1)	3 (2-3.5)	<0.001*

Satisfaction of parents is increased OSS (n=45) vs. control (n=26)



Health care related costs per patient OSS (n=45) vs. control (n=27)

- (Average) Health care costs -€113,14
- (Average) Productivity costs -€60,31