



RANDOMISED CONTROL TRIAL COMPARING DAY CARE TOTALLY EXTRA PERITONEAL REPAIR UNDER GENERAL ANAESTHESIA WITH DAY CARE LICHTENSTEIN REPAIR UNDER LOCAL ANAESTHESIA FOR INGUINAL HERNIA

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Introduction

Inguinal hernia is the most common variety accounting for approximately 75% of all hernia. Open flat mesh repair is the least costly option but provides less quality adjusted life years (QALYs) than Totally extra peritoneal repair. TEP has emerged as a safe procedure for inguinal hernia repair with reduced postoperative pain, short hospital stay and early return to work. Data comparing daycare TEP and LIHR are limited. We present short term results of a prospective randomized control study comparing day care TEP repair under general anesthesia (GA) with day care LIHR under local anesthesia (LA) in terms of postoperative pain and early mobilization.

Materials and Methods

40 patients with clinical diagnosis of unilateral reducible uncomplicated inguinal hernia and fit for anesthesia were included in the study and randomized in to two groups of day care TEP repair under GA (Group A) and day care LIHR under LA (Group B). All patients were operated by one of two consultants and were admitted and discharged on the same day according to day care surgery protocols. Postoperative pain scores were recorded at 2hours, 4hours, 6hours, day2, day3 and day7 using visual analog scale. Analgesic requirement, time to return to daily activities and time to return to work were recorded and compared.

Results

Mean postoperative pain score was significantly less in TEP group in comparison to Lichtenstein group at 4hours (p value 0.039), day2 (p value 0.005) and day 7 (p value 0.029) . Pain scores at 2hours, 6hours and day3 were also less in TEP group but were not statistically significant (p value 0.126, 0.083 & 0.062 respectively). The mean duration of hospital stay was shorter in TEP group (7.65±0.75 hours) in comparison to Lichtenstein group (8 ±1.03 hours) but was not statistically significant (p value 0.225). There was no difference in analgesic requirement (p 0.12). Return to daily activities was significantly earlier in TEP group compared to Lichtenstein group (mean 2.35±0.59 days and 3.45 ± 0.69 days respectively) with p less than 0.001. The mean time to return to work was also significantly earlier (p < 0.002) in TEP Group (6.55±2.21 days) as compared to in Lichtenstein group (9.15±2.78 days). No recurrence or chronic pain was recorded at 3months followup.

Variables No, (%)	Day Care TEP N=20	Day Care Lichtenstein N=20	p-value
Duration of surgery			
Mean (minutes)	57.50±6.59	68.50±8.75	<0.001*
Pain (VAS)			
2 hour	3.60±0.68	4.00±0.92	0.126
4 hour	1.95±0.94	2.55±0.83	0.039*
6 hour	1.55±0.89	2.05±0.89	0.083
Day 2	0.85±0.59	1.45±0.69	0.005*
Day 3	0.30±0.57	0.70±0.73	0.062
Day 7	0.10±0.31	0.40±0.50	0.029*
Duration of stay			
Mean (hours)	7.65 ± 0.75	8.00 ± 1.03	0.225
Quality of life (Days)			
Return of ADL	2.35 ± 0.59	3.45 ± 0.69	<0.001*
Return to work	6.55 ±2.21	9.15 ±2.78	0.002*



Mesh placement in TEP



Mesh placement in Lichtenstein



Post-op scar in TEP



Post-op scar in Lichtenstein

Conclusions

TEP repair under general anesthesia compares favorably with Lichtenstein repair under local anesthesia as day care procedure. Postoperative pain was significantly less in TEP repair. Return to activities of daily living and return to work were also significantly earlier in the TEP group.