ONSTEP – an innovative new procedure between Lichtenstein and TIPP; preliminary results

14 June 2013

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ORIGINAL ARTICLE

The ONSTEP inguinal hernia repair technique: initial clinical experience of 693 patients, in two institutions

A. Lourenço · R. S. da Costa

Patient Population		
Patient population	693 patients	
Gender	Male – 579 (81.8%) Female – 114 (18.2%)	
Age	18-86 years (mean 60.6 +/-7.5)	
Direct hernia	254 (37%)	
Indirect hernia	429 (62%)	
Femoral hernia	10 (1%)	
Previous hernioplasty	76 (11%)	

Procedure & Post Operative Details		
Duration of surgery	12 - 32 minutes	
Mean duration of surgery	17 minutes +/- 6 minutes	
Time to discharge	2-23 hours	
Time to return to daily activities	3-10 days	
Mean time to return to daily activities	6.1 +/- 3 days	

Complications		
Seroma	3 (0.4%)	
Haematoma	2 (0.3%)	
Wound infection	3 (0.4%)	
Residual pain	4 (0.6%)	
Recurrence overall	4 (0.6%)	
Females recurrence	3/114 (2.6%)	
Males recurrence	1/579 (0.2%)	

The Lourenço/Soares da Costa Study Conclusions

- Alternative to other open techniques
- Experience suggests that
 - the technique is simple and reliable
 - short learning curve
 - short duration of surgery
- Overall complication rate was low (1.0%) as were the overall recurrence rate (0.57%) and levels of pain (0.6%)
 - 4 cases of residual discomfort resulted
 - 3 cases required the removal of the mesh ring
 - Zero complaints of pain at 1 year

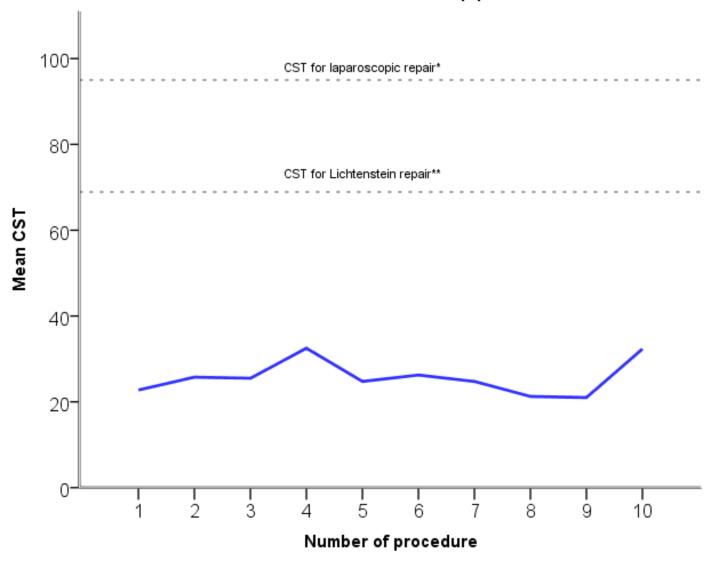
Copenhagen experience: 2012

- 75 patients, 62 responded to questionnaire
- All patients as day cases
- All patients under GA with bupivacaine blocks

Copenhagen experience: 2012

- Perioperative complications: 0
- Late complications:
 - Ring removed1
 - Recurrence1
 - Chronic pain

Cut to suture time for the first 10 Onstep procedures



ongoing studies:

- case series in different countries
- learning curve for experienced hernia surgeons
- learning curve for novice surgeons
- ONSTEP versus Lichtenstein, RCT
- ONSTEP versus TAPP, RCT

conclusions

- extremely low levels of pain and complications
- short learning curve
- fast procedure
- results look very interesting
- may be the awaited solution to reduce chronic pain
- ongoing studies in different countries