

“Is Robotic Surgery the way forward in Urogynaecology?”

Helen Preston, Ruben Trochez

Department of Urogynaecology, Liverpool Women’s Hospital



BACKGROUND

- Robotics now commonly used in surgery
- Increasing number of trusts with a robotic surgical system
- Advantages for patient and surgeon including reduced hospital stay and better ergonomics
- November 2021: Liverpool Women's the first unit in UK to introduce robotics in urogynaecology

AIM

To assess safety and outcomes of robotic urogynaecology in a tertiary centre

METHODS

- All robotic urogynaecology procedures between November 2021 and July 2024
- Using Davinci X robotic surgical system
- Patient and surgical data collected using
 - Digital patient records
 - BSUG database
- Effectiveness measured using Patients Global Impression of Improvement (PGI-I) for incontinence and prolapse

RESULTS

- 37 patients included in study
 - 29 colposuspensions
 - 8 sacrocolpopexies
- Robotic surgical system - Davinci X
- Follow up average – 5 months

Demographic	Colposuspension	Sacrocolpopexy
Age	38-80 (48)	56-80 (72)
BMI	21.5-42.4 (30.6)	21.6-33 (28.6)
Parity	1-4 (2)	2-4 (3)

RESULTS: SAFETY

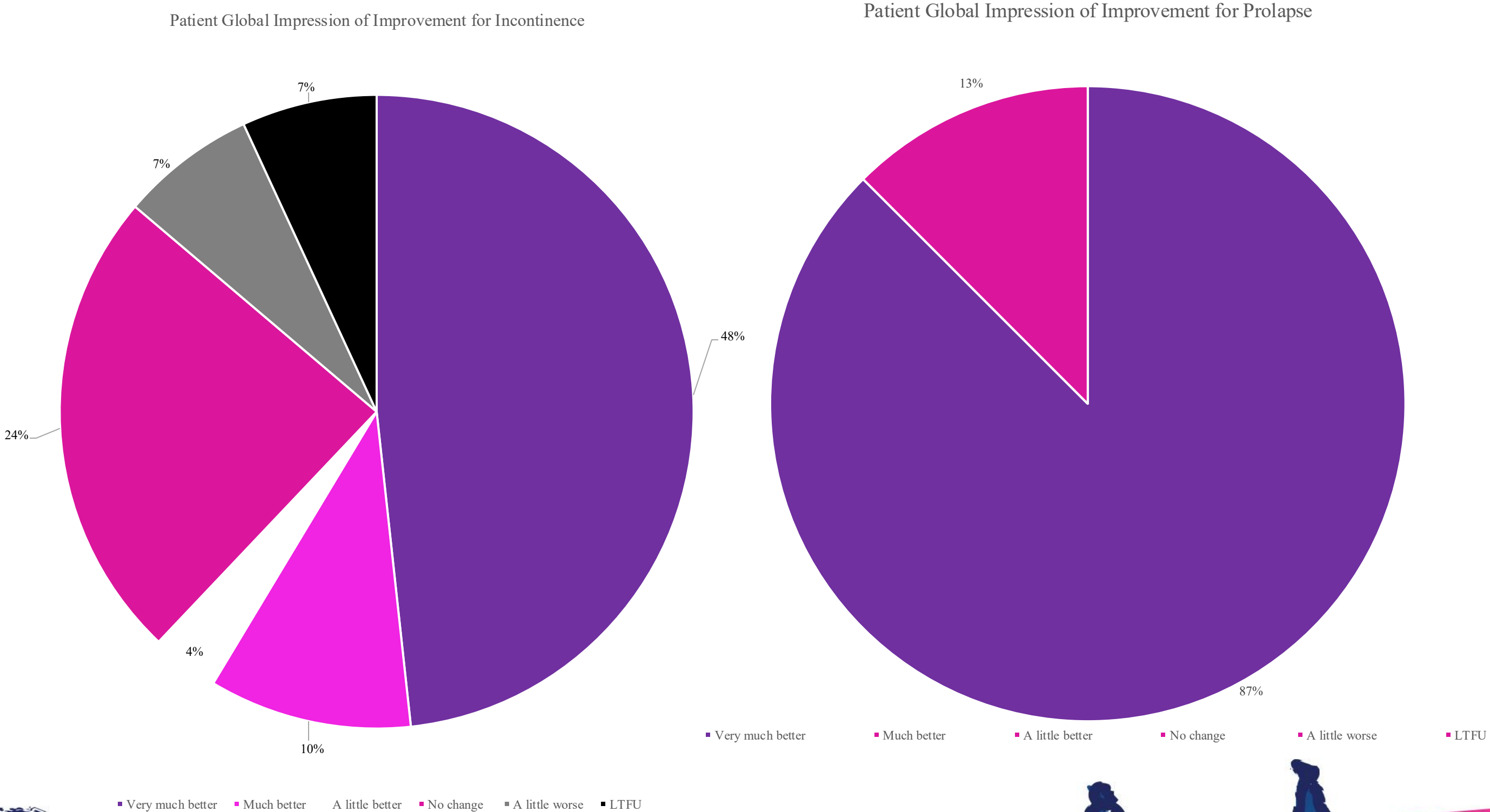
	Colposuspension	Sacrocolpopexy
Operating Time	115 (85-160)	202 (130-310)
Estimated Blood Loss	34.5 (20-80)	58.8 (20-200)

RESULTS: SAFETY

- COMPLICATIONS
- Colposuspension
 - Bladder injury (1)
 - Pelvic haematoma (1)
 - UTI (1)
 - Sacrocolpopexy
 - No Complications

RESULTS: OUTCOMES

- Using PGI-I scores
- Colposuspension
 - 66.6% patient improvement in incontinence
- Sacrocolpopexy
 - 100% patient improvement in prolapse



KEY FINDINGS

- Robotic urogynaecology appears to be a safe method of performing colposuspension and sacrocolpopexy
- Good outcomes, particularly for robotic sacrocolpopexy
- Outcome data comparable with other studies
 - Imamura et al (1)
 - Coolen et al (2)
- Limitations
 - Small study
 - Short follow up
 - Patient reported outcome (ePAQ) not analyse

RECOMMENDATIONS

- Continued data collection to evaluate
 - Outcomes
 - Safety
- Research: long term complications
- Consider implications on training

REFERENCES

1. M Imamura, J Hudston, S Wallace et al. (2019). Surgical interventions for women with stress urinary incontinence: systematic review and network meta-analysis of randomised controlled trials. BMJ Jun 5;365:l1842. doi: 10.1136/bmj.l184

2. A Coolen, A Oudheusden B Willem et al (2017). Laparoscopic sacrocolpopexy compared with open abdominal sacrocolpopexy for vault prolapse repair: a randomised controlled trial. International Urogynecology Journal 17;28(10):1469–1479.