

## **Donor surgery: Post-op Complications**

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### **ISSUE**

What are the complications after laparoscopic donor nephrectomy?

### **DATA**

With the advent of laparoscopic donor nephrectomy, post-operative discomfort has decreased. In a study comparing open and laparoscopic donor nephrectomy, the laparoscopic approach was associated with better pain control, better respiratory function, decreased hospital stay, and earlier return to normal activities<sup>1</sup> and improved cosmetic results. Recipient outcomes and organ quality are similar for open and lap nephrectomy. Several studies have evaluated complication rates.

In a UNOS study of 13,000 donors from 2005-6, centers reported 1.7 % readmission rate, 0.6 % had interventional procedures, 0.5% reoperations, 0.5% transfusions<sup>2</sup>.

In a single center US study of 1500 cases, 3.5% were readmitted, mostly for GI complaints. Reoperation was needed in just 0.4% (SBO and wound dehiscence) and there were 1.8% incisional hernias<sup>3</sup>.

In a study of 700 laparoscopic donor procedures in Japan, just 3% had perioperative complications, mostly slow bowel recovery, shoulder pain, urinary retention, and wound infection<sup>4</sup>.

Single port laparoscopic nephrectomy (LESS- LDN) has results equal to the traditional multiple port surgery but with lower analgesic requirement<sup>5</sup>.

One year rehospitalization rates after donor nephrectomy were significantly better (5% at 1 year) than those after appendectomy, cholecystectomy, and nephrectomy for nonmetastatic carcinoma<sup>6</sup>

### **RECOMMENDATION**

1. Laparoscopic donor nephrectomy is safe and is associated with acceptable complication rates and low re-admission rates.

## References

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Note: The recommendations in these chapters are the opinions of the Living Donor Community of Practice of AST. They are not meant to be prescriptive and opinions by other groups or institutions may be equally valid.