



ISQua's 39th International Conference

27th- 30th August | COEX Seoul



Application of Percutaneous Cryoablation Therapy to Improve the Quality of Post-operation Care in Patients with Renal Tumors

Nan-Han Lu¹, Kuo-Ying Liu¹, Hung-Yu Lin², Lien-En Huang³
Department of Radiology¹, Surgery², Quality Management³, E-DA Cancer Hospital/I-Shou University

ISQUA2023-ABS-1851
P666

INTRODUCTION

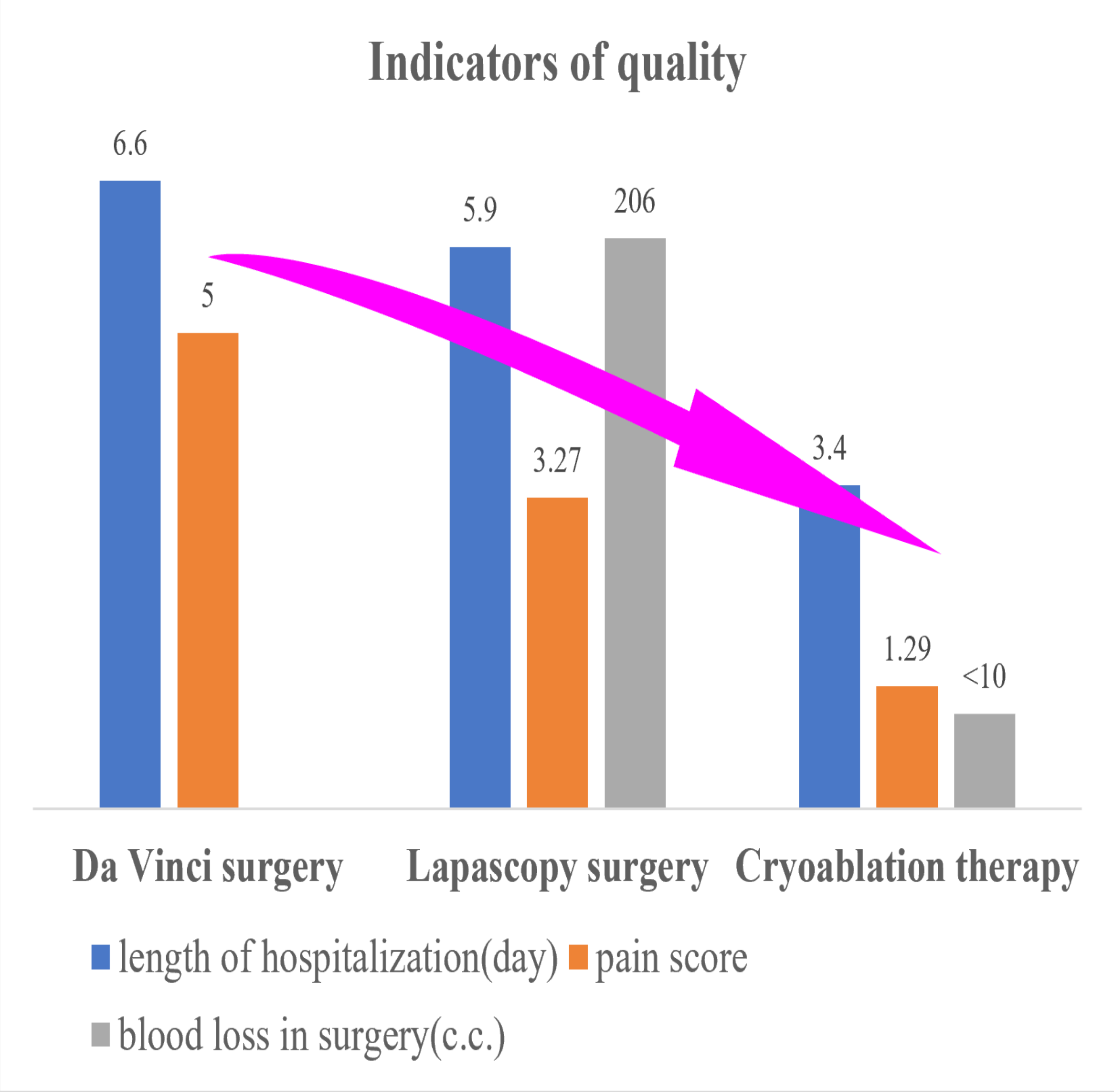
Surgical treatment is the first choice with partial nephrectomy for early renal tumors. The use of partial nephrectomy still need to consider the post-operation care problems. In recent years, the minimal invasion treatments have developed such as laparoscopic surgery, radiofrequency ablation and cryoablation therapy. There are advantages and disadvantages in these treatments.

AIM

The purpose of this project is to apply the percutaneous cryoablation therapy in patients with renal tumors and to improve the quality of post-operation care.

RESULTS

From January 2022 to December 2022, 8 patients(mean ages were 60±6.3 year-olds) with renal tumors(mean size=3.5±1 cm) received the percutaneous cryoablation therapy. The procedures were 100% technically successful, and no complications, in all patients. There was no morbidity such as fever, wound infection, and bleeding. Indicator one: average of pain score is 1.29 and decreased 60% as compared to laparoscopic surgery. Indicator two: average length of hospitalization is 3.4 day and decreased 42% as compared to laparoscopic surgery. Through four elements of TRM, the team of medial staff improve the knowledge, attitude, and performance of clinical caregivers.



METHOD

Team resource management(TRM) is the use of clinical teamwork including radiology, anaesthesia department and surgical staff. The medical team pay attention to leadership, monitoring, mutual assistance and communication. We performed the cryoablation procedures in the operation room(OR) with real-time computed tomogram(CT) guiding. All patients under general anaesthesia were placed in prone or oblique prone position. First step, we did the biopsy of the renal tumor. Second step, we inserted the cryoablation needles into the tumor in appropriate location. Third step, three cycles of cryoablation therapy were performed. Finally, we evaluated the post treatment condition using real-time CT images. Quality of post-operation care, indicators included the pain score, morbidity and length of hospitalization.

CONCLUSIONS

Our results strongly suggested that the percutaneous cryoablation therapy for treatment of renal tumors is effective to improve the quality of post-operation care. Obviously, decreased patient's pain score and shortening the length of hospitalization are noted. Meanwhile, the medial team use the strategy of TRM to promote the quality of care and to improve the patient safety.

REFERENCES

1.Maria T, Georgiades C. Percutaneous Cryoablation for Renal Cell Carcinoma. J kidney Cancer VHL. 2015 Jun 9;2(3): 105-113.
2.Klatte T, Ficarra V, Gratzke C, Kaouk J, Kutikov A, Macchi V, Mottrie A, Porpiglia F, Porter J, Rogers CG, Russo P, Thompson RH, Uzzo RG, Wood CG, Gill IS. A Literature Review of Renal Surgical Anatomy and Surgical Strategies for Partial Nephrectomy. Eur Urol. 2015 Dec;68(6):980-92. doi: 10.1016/j.eururo.2015.04.010. Epub 2015 Apr 22. PMID: 25911061; PMCID: PMC4994971.

CONTACT INFORMATION

Nan-Han Lu. MD. PhD.
Department of Radiology, E-DA
Cancer Hospital/I-Shou University
E-mail: ed103911@edah.org.tw