

Prof. Young-Woo Kim: SPADE operation is a new reconstruction method following proximal gastrectomy

Received: 26 August 2018; Accepted: 10 September 2018; Published: 25 September 2018.

doi: 10.21037/ales.2018.09.06

View this article at: <http://dx.doi.org/10.21037/ales.2018.09.06>

Editor's note

The 4th Annual East Meets West: A Medical and Surgical Symposium was held in Shanghai from August 17th to 18th, 2018. This conference is jointly organized by Ruijin Hospital, Shanghai, China and Florida Hospital, Orlando, USA.

This symposium is designed to bring together surgeons and gastroenterologists from North America and Asia. Cooperation between Chinese surgical leaders and North American leading surgeons and gastroenterologists served as the beginning of this symposium.

Moreover, this symposium has brought together certain number of outstanding European surgeons to highlight some of the cutting-edge ideas and discuss evolving and latest treatments for gastrointestinal diseases. Comparison of treatment approaches from the East and West and convergence and overlap of advanced endoscopy and surgery are emphasized. The symposium features live demonstrations of procedures and procedural videos as the foundation of learning and discussion for all presented experts.

During this conference, the editor of *Annals of Laparoscopic and Endoscopic Surgery* had the great honor to have an interview with Prof. Young-Woo Kim (*Figure 1*).

Expert introduction (*Figure 2*)

Prof. Young-Woo Kim is the Chief Surgeon of Center for Gastric Cancer, National Cancer Center, Goyang, Korea.

Dr. Young-Woo Kim graduated from Seoul National University School of Medicine in 1988 and finished his training at the Department of Surgery of Seoul National University Hospital. And, he served as a flight surgeon, ROK Air Force Captain for three years. From 1997 through 2002, he had been working for Ewha Womans University as a faculty. Now he is a Chief Surgeon in Center for Gastric



Figure 1 Prof. Kim is making a speech.

Cancer, Research Institute & Hospital, National Cancer Center as well as a professor of Department of Cancer Control and Policy at National Cancer Center Graduate School of Cancer Science and Policy. From Jun 2014 through Aug 2014, he was an Honorary Visiting Professor at Imperial College of London. His main research field is gastric surgical oncology encompassing clinical trials, developing surgical techniques of laparoscopic surgery, robotic surgery, and open surgery, translational researches over gastric cancer, and medical device development. He developed 3D laparoscopy system and planned surgical robot development for the Korean government. He has performed over 5,000 gastrectomies including over 3,000 laparoscopic and, 200 robotic gastrectomies so far.

Prof. Kim has published over 279 original articles and several book chapters for *Laparoscopic Gastrectomy*, textbook of *Oncology*, textbook of *Gastric Cancer* in Korea. His main publication includes *JAMA* paper for FAIRY trial in 2017, and first level 1 evidence for role of laparoscopic gastrectomy in *Annals of Surgery and Surgical Endoscopy* (COACT 1301 trial). His recent main clinical trial is ADDICT trial for D1+ vs. D2 for stage IB and II gastric cancer. He is current SMIT president organizing iSMIT & IBEC2018 on 8–10 Nov in Seoul.



Figure 2 Prof. Young-Woo Kim.



Figure 3 Prof. Young-Woo Kim: SPADE operation is a new reconstruction method following proximal gastrectomy (1). Available online: <http://www.asvide.com/article/view/27298>

Interview (Figure 3)

ALES: *In this conference, you have given a wonderful speech on “SPADE Operation: A new Reconstruction Method Following Proximal Gastrectomy”. Can you talk a bit about it?*

Prof. Kim: The SPADE operation is a kind of the method of the anastomosis after proximal gastrectomy. It's a new innovation to prevent reflux after surgery. It's not perfect but better than the conventional anastomosis. The reflux is the main problem after proximal gastrectomy. As a result, there are a lot of diverse innovations or modifications of the anastomosis, but so far there is no optimal one. For

example, double tract anastomosis is too complicated with surveillance problems and nutritional pitfalls. So, I have devised SPADE operation. The important point of this operation is to make an anastomosis in the abdominal cavity not in the thoracic cavity. If the anastomosis tip overrides over the diaphragm level, it can make a reflux because of negative pressure. So, it is very important to make anastomosis down under the diaphragm in order to prevent reflux. And then second part is making sure of double suture fixing of distal posterior esophageal wall to the gastric anterior wall. Its purpose is to make an artificial fundus. If the stomach is full after the meal, it can make a side pressure to close gastroesophageal junction. The gastric function is not normal and then the gastric volume is diminished anyway after proximal gastrectomy. But if the patient modified their lifestyles, I think it's very tolerable. More than 90% of the patient don't need the additional medication to reduce the reflux symptoms. Overall, I'm very satisfied with this surgical technique. Comparing with the total gastrectomy, I believe there must be some nutritional benefits and that quality of life must be better than total gastrectomy. A proximal gastrectomy doesn't need supplementation of the vitamin B12. So, I think this innovation will work and then I hope any other surgeons could innovate more to make this operation as a state of art surgery to improve the quality of life of the patients for the proximal located cancer.

ALES: *Is the new reconstruction method mentioned above widely used in your department? What are the advantages of this new approach?*

Prof. Kim: I started this operation 3 years ago in my department, we have collected more than 30 cases so far, but we didn't do anything for trial because we're still exploring. Now, I think it is somewhat standardized and we are ready to do clinical trials. We are applying this operation for stage I or II patients. I don't have any plan to do a randomized controlled trial with a total gastrectomy because it takes a lot of patients and we don't think it's necessary. I just want to show the feasibility and functional outcome of this operation. So, we are planning a multi-centered phase II trial enrolling 100 to 200 patients. So, after the trial I hope it could be a standardized operation I think new concept is important to be useful for the patients. So, I hope there are more gastric cancer surgeons adopting this concept and then doing this surgery for the patients in the future.

ALES: Do you have anything special to share with regard to your findings in minimally invasive surgery?

Prof. Kim: For the advancement of the laparoscopic surgery, this kind of innovation aims to improve the quality of life and preserve the function. Minimally invasive surgery has changed and developed numerously, not just with a minimally access but combining with a new insight of the knowledge over the pathophysiology. We could do better for the patient through the clinical trial. I hope this kind of minimally invasive surgery not only just does a minimally access but combines some smart idea to improve the quality of the life of the patient.

ALES: Last, what is the status of implementation of minimally invasive surgery in Korea?

Prof. Kim: 10 years ago, minimally invasive surgery was even criticized by the senior surgeons because the quality of surgery is uncertain, but nowadays nobody would argue about the role of minimally invasive surgery, especially for the gastric cancers. It proves that survival rate of the two surgeries is similar but the life quality of the patients after a minimally invasive surgery is far better. Therefore, in Korea, for early cancer patient, a minimally invasive surgery becomes increasing popular and standardized. For example, half of the whole cases were done by laparoscopic surgery in 2014. So currently, in my center, 70% of gastric cancer patients receive laparoscopic surgery. For the stage III patients, we do open surgery currently, but in the future, I think we should not just do “particular surgery” for stage III patients as survival is most important, and we need to do more research to combine surgery with other techniques or treatments to improve the survival of the patients. Hopefully, improving survival as well as the quality of life is the main future direction of this surgery.

Acknowledgments

Funding: None.

Footnote

Provenance and Peer Review: This article was commissioned by the editorial office, *Annals of Laparoscopic and Endoscopic Surgery*. The article did not undergo external peer review.

Conflicts of Interest: Both authors have completed the ICMJE uniform disclosure form (available at <http://dx.doi.org/10.21037/ales.2018.09.06>). The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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References

1. Lee R, Young L. Prof. Young-Woo Kim: SPADE operation is a new reconstruction method following proximal gastrectomy. *Asvide* 2018;5:756. Available online: <http://www.asvide.com/article/view/27298>

(Science Editors: Red Lee, Luna Young, ALES, ales@amegroups.com)

doi: 10.21037/ales.2018.09.06

Cite this article as: Lee R, Young L. Prof. Young-Woo Kim: SPADE operation is a new reconstruction method following proximal gastrectomy. *Ann Laparosc Endosc Surg* 2018;3:77.