SILS Bariatric Surgery for animal model

<sup>1</sup> Department of Gastrointestinal surgery, Nagoya City University, Nagoya, Japan Satoru Takayama<sup>1</sup>, Masaki Sakamoto<sup>1</sup>, Hiromitsu Takeyama<sup>1</sup>

Laparoscopic metabolic surgery was developed through the application and experienced mainly in western countries. And it is also spreading in Asian countries. Meanwhile Single-incision laparoscopic surgery is aimed at improving the cosmetic outcome following surgery appears now a day. Much of this knowledge from the procedures comes from the study of animal models, where they have revealed technical feasibility. This time we have experienced three kinds of SILS bariatric surgeries for animal models. The first one was the gastric banding, the second one was the sleeve gastrectomy and the third one is  $\rho$ -Y bypass. All of these cases, we placed SILS port near umbilicus at the beginning of surgery and used flexible forceps. In case of gastric banding, we used flexible SILS Stitch, and in case of sleeve gastrectomy we used Duet which is also flexible to avoid interference of forceps. And the bypass case, we used V-Loc suture to free from the stress of knotting. Using such new methods, we have successfully performed these bariatric surgeries. It is true that this methodology need experienced technique and need more time than conventional multi incisional surgery. But we believe we can make the operative time shorter and improves cosmetic outcome without additional risk even for human SILS bariatric surgery. This methodology may be applied widely for human as the option for new bariatric surgeries in near future. Thereby we would like to introduce these experiences.