

Bendable forceps, needle forceps, and a multichannel port to revive the lost triangle in single incision endoscopic surgery.

Eiji Kanehira, Kunihisa Shiozawa, Takashi Tanida, Aya Kamei

Medical Topia Soka, JAPAN

Single incision endoscopic surgery has been attracting attention recently. Discussion on this new modality includes how to solve the problems arising from the fact that all instruments are placed in a parallel direction.

To solve the problem above mentioned, we are using a bendable forceps (Snowden Pencer Flex), a 2mm forceps (BJ Needle), and a multichannel port (x-Gate). These instruments facilitate reviving the triangle formation in surgical procedure, which is important but lost in the conventional single incision endoscopic surgery.

Since May 2009 we have performed 127 single incision laparoscopic surgery (SILS) using the same combination of devices. The operation included cholecystectomy, local gastrectomy, intragastric surgery, colectomy, splenectomy, appendectomy, and transabdominal inguinal hernia repair. In our series the incision in the navel ranged 2cm to 3cm. The puncture site for BJ Needle was only approximately 2mm, which the patients did not complain of and became almost invisible in a couple of months after operation. We call our procedure "SILS POP". POP stands for "plus one puncture".

During the operation a variety of maneuvers could be performed according to the intention of surgeons as the triangle formation between the energy device and the grasper, or between the main grasper and the assisting grasper, or the telescope and the energy device could be created without significant conflict between the instruments. Thus even manual suturing was facilitated.

Through our experience we are convinced that SILS POP with bendable forceps, needle forceps, and a multichannel port can reduce the difficulty and contribute to the safety in single incision endoscopic surgery.