

Single-Port Endoscopic Cholecystectomy in Dogs: Feasibility Study

Soyeon Lee, Beomjun Shin, Jaeyeon Lee, Jiyoung Park, Soohyun Kim, Wonsuk Hur,
Seongjun Park, Sungwhan Cho, Myungcheol Kim and Seong Mok Jeong*

College of Veterinary Medicine, Chungnam National University, Daejeon, Korea

Purpose: To evaluate the feasibility of Single-port endoscopic surgery, by means of cholecystectomy in beagle dogs.

Materials & Methods: Three beagle dogs were used in this study. A 2 cm single periumbilical incision was performed, and flexible endoscope was introduced into the abdominal cavity. A laparoscopic grasper was inserted into the abdominal cavity for the traction of gall bladder. Cystic duct and artery were ligated by 5 mm Hem-o-lok®. Then, gall bladder was dissected and resected from the liver with 5mm Autonomy Laparo-Angle Maryland dissector and endoscopic needle knife. Resected gall bladder was wrapped by using specimen pouch and was extracted through abdominal incision from the cavity.

Results: All three gall bladders were successfully removed. Hematological changes were not observed during examination periods. No leakage sign was identified at necropsy.

Conclusion: This procedure will play an important role in next generation of minimally invasive surgery of abdominal surgical procedure in small animal practice.

Key words: single-port surgery, flexible endoscope, cholecystectomy, dog.

*Corresponding author: jsmok@cnu.ac.kr