

Animal-Free Surgical Training Model “innovet” for a New Global Standard in Veterinary Education

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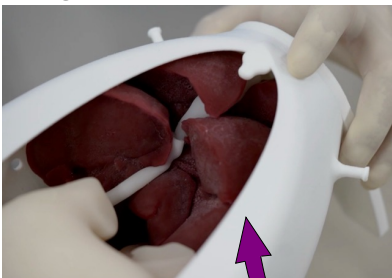
In recent years, there has been a growing demand in life science education to eliminate the use of live animals from the perspective of animal welfare. In veterinary education, in particular, the sacrifice of animal lives has long been regarded as an unavoidable aspect of learning surgical techniques.

To address this issue, we have developed an original surgical training model “innovet” that enables realistic and effective practice without the use of live animals. The system consists of a dog-shaped abdominal case that houses elastomer-based organ models – including the liver, spleen, stomach, intestines, kidneys, bladder, ovaries, and uterus – allowing students to perform a wide range of surgical procedures such as splenectomy, gastrotomy, enterotomy, cystotomy, and ovariohysterectomy. This model provides a hands-on learning experience comparable to live-animal training and stands out as a distinctive innovation in veterinary education. Furthermore, InnoVet supports not only veterinary student training but also the professional skill development of veterinarians after graduation.

innovet has been introduced at several veterinary schools in Japan, and its use is now expanding both nationally and internationally. Our goal is to make this model a new global standard for veterinary education, combining ethical values with practical training and moving toward the complete elimination of live-animal use.

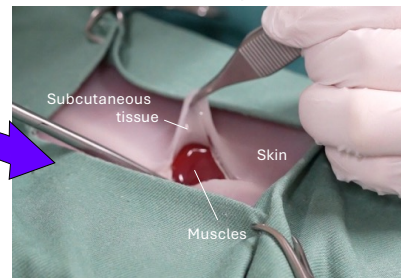
【 Cholecystectomy 】

The gallbladder with common bile duct connect to the duodenum.



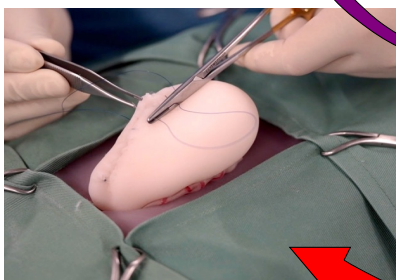
【 Skin suturing 】

It consists three-layer structure.



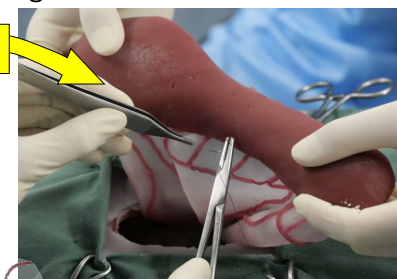
【 Gastrotomy 】

It also provides practice of pyloroplasty.



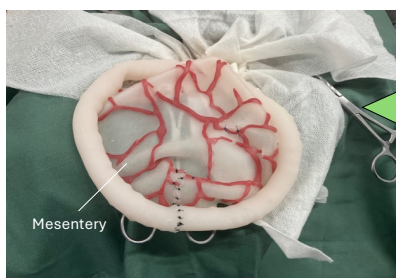
【 Splenectomy 】

It is attached with gastrosplenic ligament and vessel.



【 Enterotomy and Intestinal anastomosis 】

The intestine contains a foreign body.



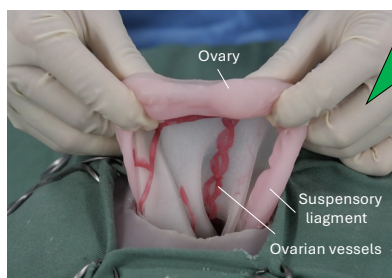
【 Cystotomy 】

It contains bladder stone, enabling practice of a two-layer inverting closure.



【 Ovariohysterectomy 】

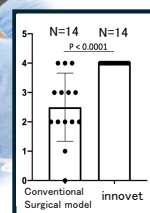
It includes suspensory ligament, ovarian vessels and uterine vessels.



【 Ova · Uter 】



“innovet” enhanced students’ understanding during practical training.



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