

An Effort to Increase Necropsy Rate of Companion Animals in Japan

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Background

Necropsy of companion animals is far less frequently performed in Japan than in the North America. This has been preventing Japanese veterinary practitioners from proper understanding of mechanism of various diseases. To improve this situation, the author began a paid, mainly on-site necropsy service for companion animals in December 2012 in Tokyo and surrounding prefectures (Kanto area). Number of cases now reached 99 and factors behind the low necropsy rate have been becoming clear through conversation with many veterinarians and animal owners. This poster shows the results of the interviews, proposed solutions, and activities of the Japanese ACVP-certified veterinary pathologists.

Category		Suspected causes of the low necropsy rate in Japan
Cultural background		<ul style="list-style-type: none"> Prohibition of the killing of animals in Buddhism is likely the base of the concept that “we shouldn’t touch or examine the dead animals.” Dead bodies, especially of those much loved, are regarded highly sacred as depicted in the film “Departures” (winner of 2008 Academy Award for Best Foreign Language Film featuring the life of a Japanese encoffiner).
Veterinary pathologists	Veterinary schools (academia)	<ul style="list-style-type: none"> Lack of fee-based necropsy service open to public. Difficulty in balancing necropsy-related operations with teaching, research, clerical work, etc. because of paucity of budget and staff. Fear for getting involved in time-consuming extra work such as a lawsuit.
	Private diagnostic labs	<ul style="list-style-type: none"> Necropsy is definitely a job of low cost effectiveness so naturally avoided. Veterinary pathologists’ gradual loss of enthusiasm for necropsy because of a big load of routine histopathology.
Veterinary practitioners		<ul style="list-style-type: none"> Simply don’t know how to perform necropsy by themselves or they can ask help of veterinary pathologists. Feel no or little need for necropsy because results of clinicopathological workups seem to be enough to explain the clinical problems (though it often isn’t the case). Persuading the animal owners into necropsy is not an easy job.
Animal owners		<ul style="list-style-type: none"> Simply don’t know the existence of veterinary pathologists whom they can rely on to investigate the cause of death. Feel too much sorry for getting their pets under the knife even after death. Financial issues (cost of treatment is already a burden).
Government		<ul style="list-style-type: none"> Complete lack of a grand design on better utilization of animal necropsy in various socioeconomic settings.



Dr. Kondo (right) is coaching an internship student on necropsy at his workplace (★3 in the map below).



Dr. Tanabe (center) is posing with her clients after a necropsy visit.



I am giving elementary school children a talk on the subject “what is life?” using necropsy-related information.



Visit clients by car with necropsy equipment.



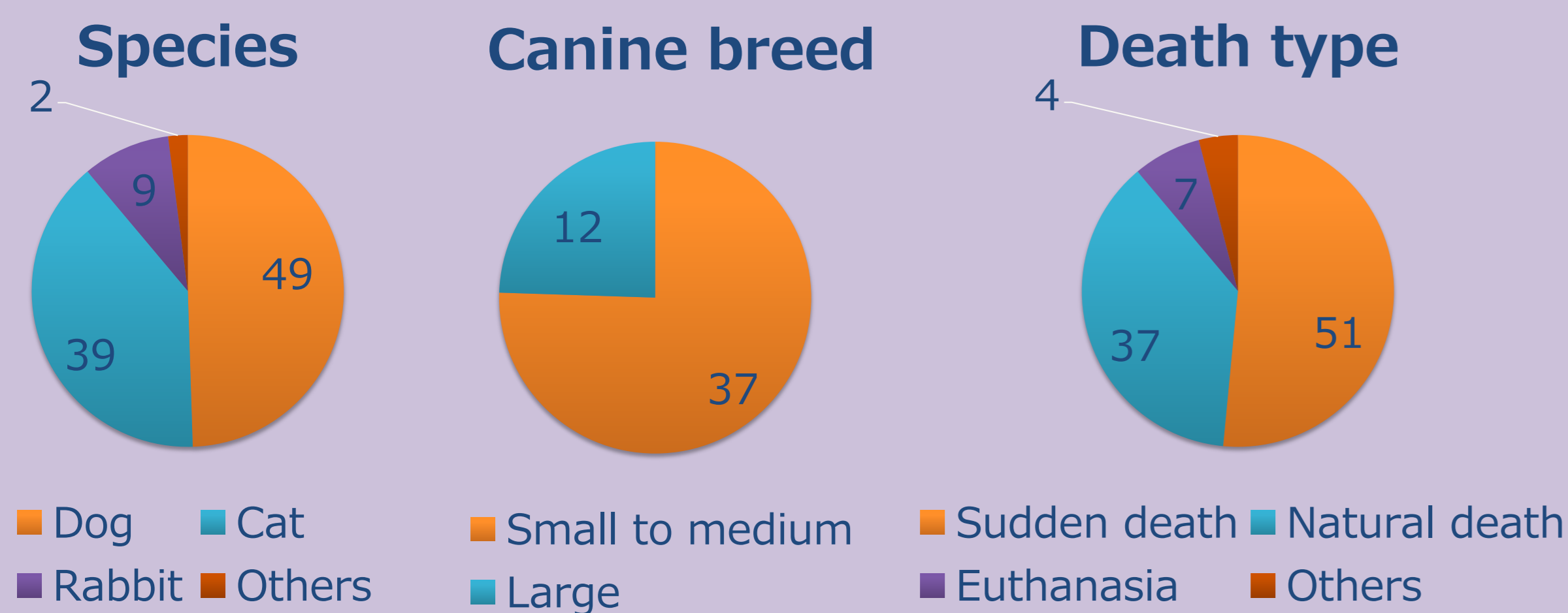
Necropsy is usually performed in the clients' operation room.

On-site necropsy is different from that performed in necropsy rooms.

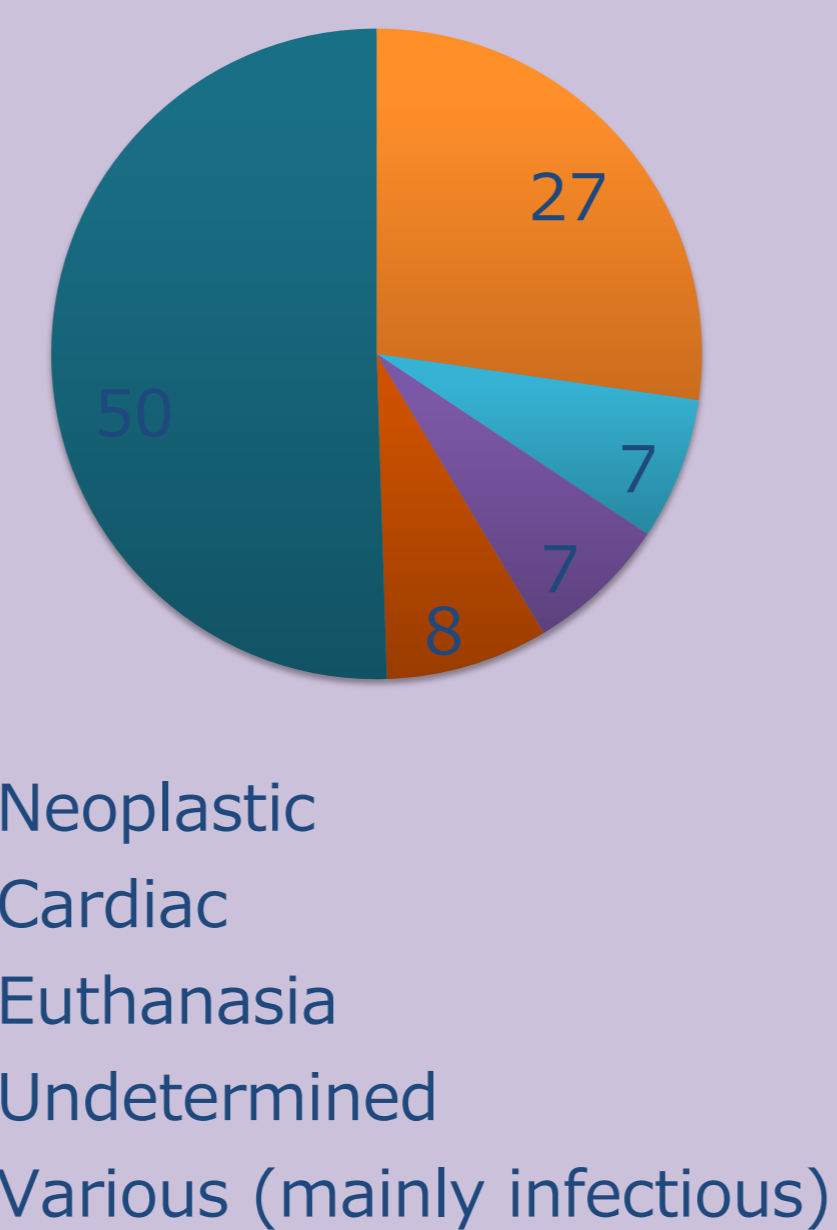
- “Dry necropsy” (whole procedure is completed without using running water) is suitable to keep work environment clean.
- Suture and cleanup of the carcass is usu. left to clients to save time and money.
- Tissue samples are kept in formalin or frozen/chilled for further examination.

Mini stats on 99 necropsy cases of the author's company (Dec. 2012 – Sep. 2015).

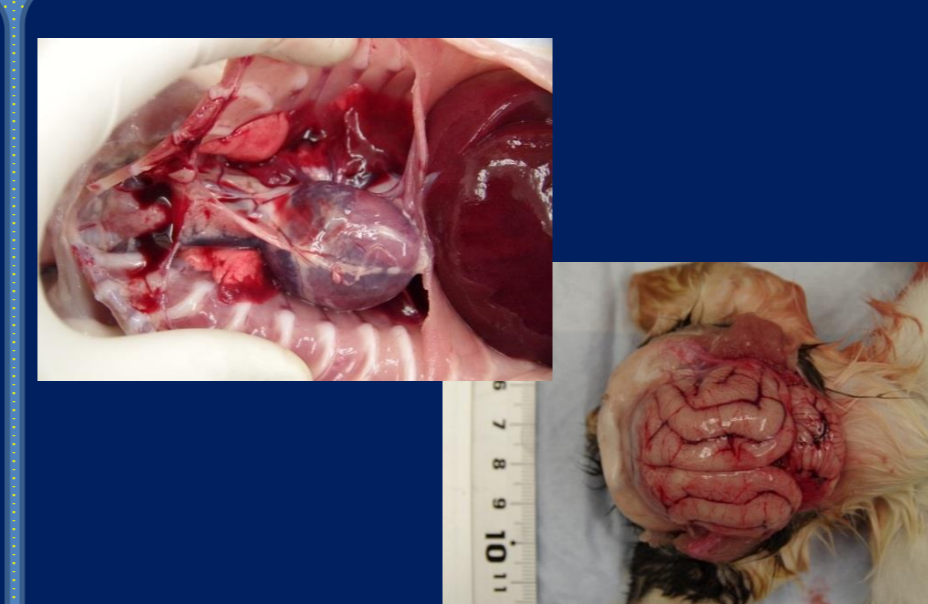
- Cats and small- to medium-breed dogs predominate.
- Sudden unexpected death and long-term illness with poor response to therapy tend to evoke decision to ask necropsy.
- Likely or definitive cause of death was determined in most cases due to freshness of the carcasses and availability of clinical information.
- Euthanasia is not common in Japan unlike in the Western world.



Cause of death



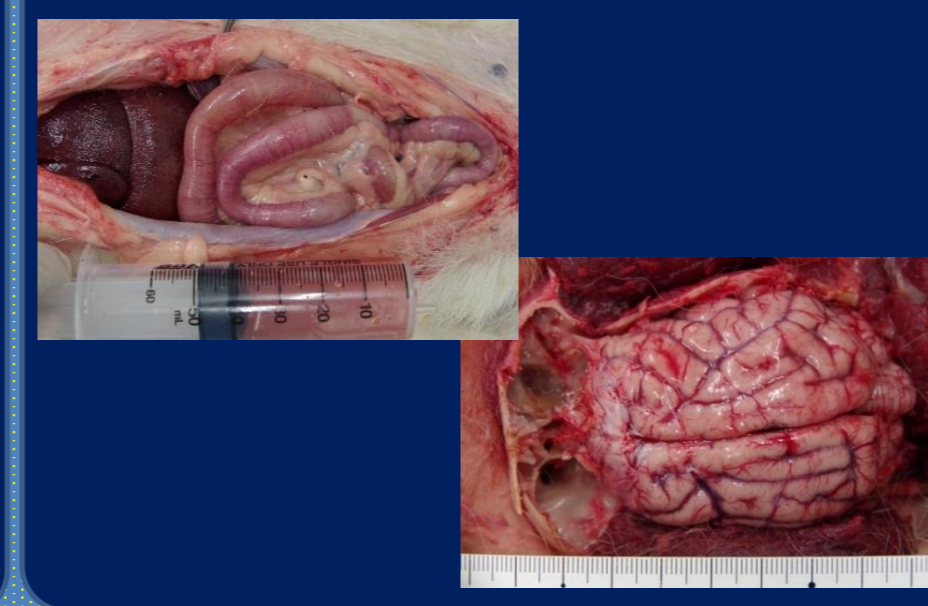
Before,



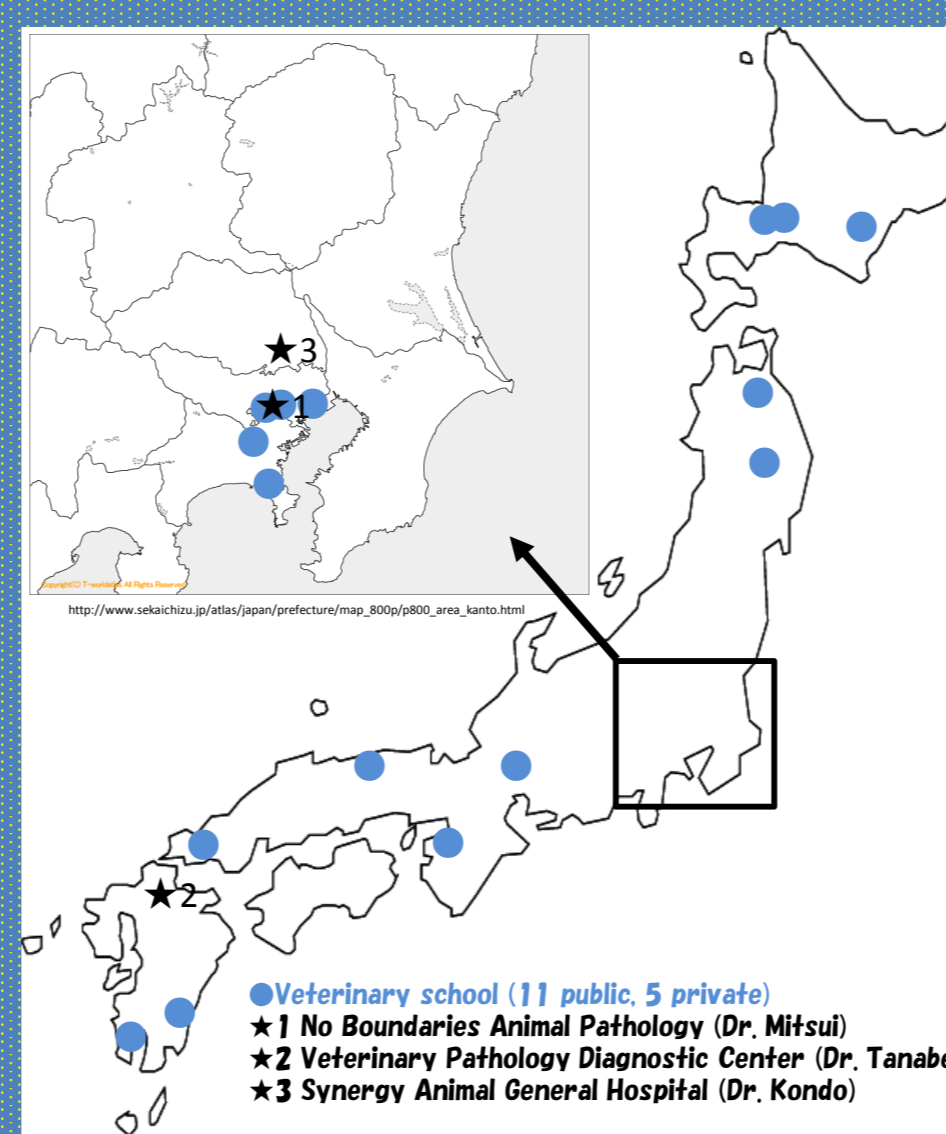
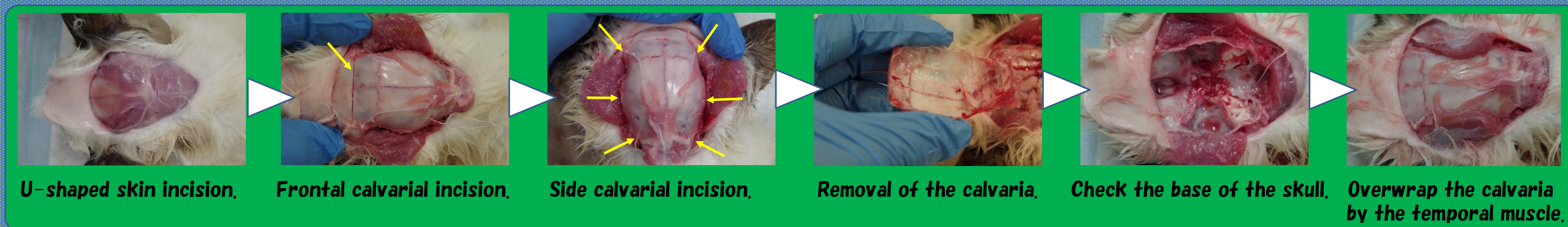
during,



and after a “meticulous cosmetic necropsy.”



- Leave hair coat **unclipped** so that it can hide an incision wound.
- U-shaped head skin incision** enables a natural-looking closure (details are shown below).
- Skin closure can be done by suture or **instant glue** (after secure closure of abdominal muscular wall).
- Shampooing** and drying hair coat are appreciated by animal owners.
- Many types of **pet coffins** are available in Japan.



<Above> Cosmetic necropsy procedure to examine the central nervous system of a cat.
 <Left> A map of Japan showing location of 16 veterinary schools and 3 private diagnostic laboratories offering necropsy service.
 <Right> Proposed solution to increase necropsy rate of companion animals in Japan.

Acknowledgement

- Apollo animal hospital (Saitama)
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- Ishikawa animal hospital (Aichi)
- Dr. Mika Tanabe (DACVP anatomic/clinical pathology)
- Dr. Hiroataka Kondo (DACVP anatomic pathology)
- All examined animals and their owners

What can we do to boost up necropsy rate?

- Keep carefully explaining about power and usefulness of necropsy through various media.
- Harmonize with a traditional sense of values.
- Satisfy anxious animal owners by a “meticulous cosmetic necropsy” so that they can peacefully say good-by to their pets.
- Reasonable price setting.