Canine Transmissible Venereal Tumour (CTVT)

Project

Department of Veterinary Medicine

University of Cambridge

UNIVERSITY OF CAMBRIDGE
Department of Veterinary Medicine

TVT
Canine Transmissible Venereal Tumour

Photo: Anna Czupryna

For any questions about the project or sample collection contact
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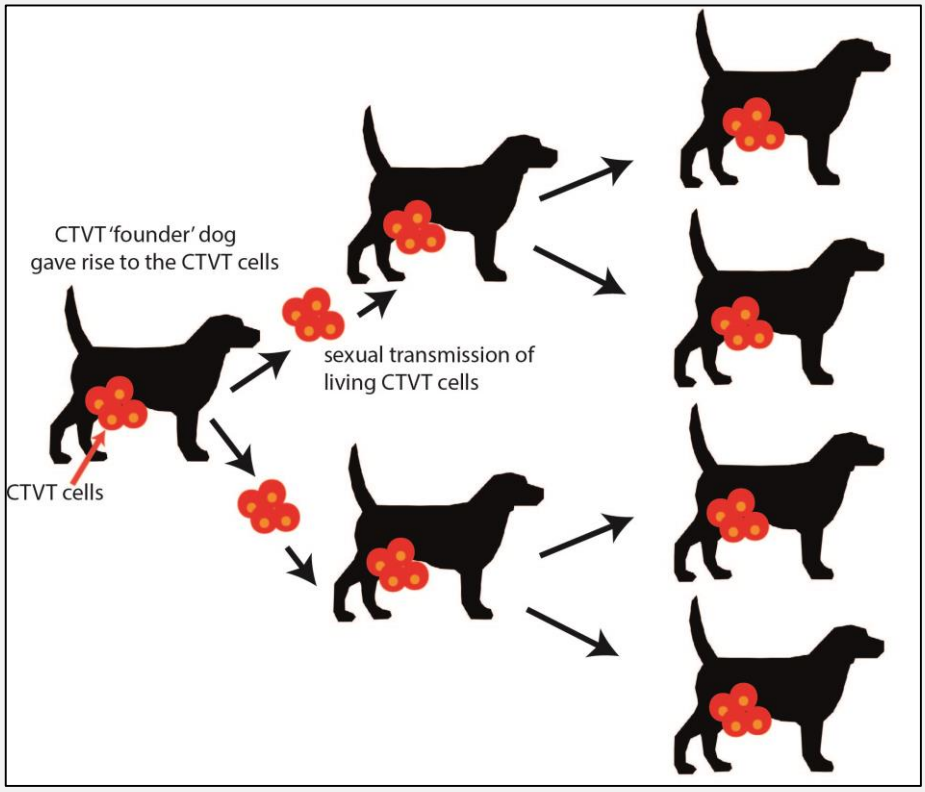
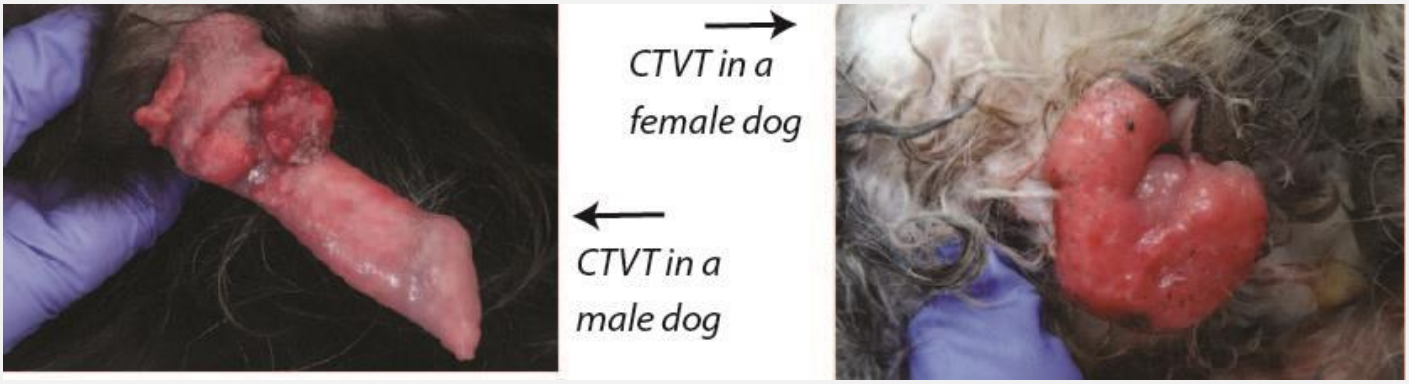
THANK YOU VERY MUCH FOR YOUR CONTRIBUTION, YOUR SAMPLES WILL BE EXTREMELY USEFUL AND INTERESTING FOR OUR STUDY!

WHAT IS CTVT?

Canine Transmissible Venereal Tumour (CTVT), also called TVT or Sticker's sarcoma, is a transmissible cancer which arose around 11,000 years ago and has been transmitted by living cancer cells during coitus between individual dogs.





AIMS OF THE CTVT PROJECT

1. Understand the origins of CTVT and its spread through the dog population
2. Map the genetic diversity of CTVT around the world
3. Understand the evolution of CTVT
4. Develop new methods for CTVT prevention and treatment
5. Use knowledge from our studies of this unique cancer to advance understanding of human cancer evolution

CTVT PROJECT
SAMPLE COLLECTION SUMMARY

Canine Transmissible Venereal Tumour

CTVT INFECTED CASES

The three most important samples that we are collecting from each CTVT infected animal are:

1) Tumour in RNAlater (label e.g. #1 TVT, tumour, RNA)
2) Tumour in formalin (label e.g. #1 TVT, tumour, formalin)
3) Host tissue in RNAlater - gonads (better) or blood (mix 2-3ml EDTA blood + 1ml RNAlater) (label e.g. #1 TVT, ovary/testis, RNA)
4) Photo, if possible

Please, fill in a data collection sheet with each case.

Additional samples, if possible, but not necessary:

5) Serum sample (around 2-3ml of serum if possible)
6) Cytology smear
7) Follow up samples during treatment – collect tumour samples each week when animal receives Vincristine (no need for a host sample)
-tumour in RNAlater
-tumour in formalin
-serum

CONTROL CASES

These are samples from the same population of dogs, but these dogs are not infected with CTVT. Collect 1-2 control samples for each CTVT case.

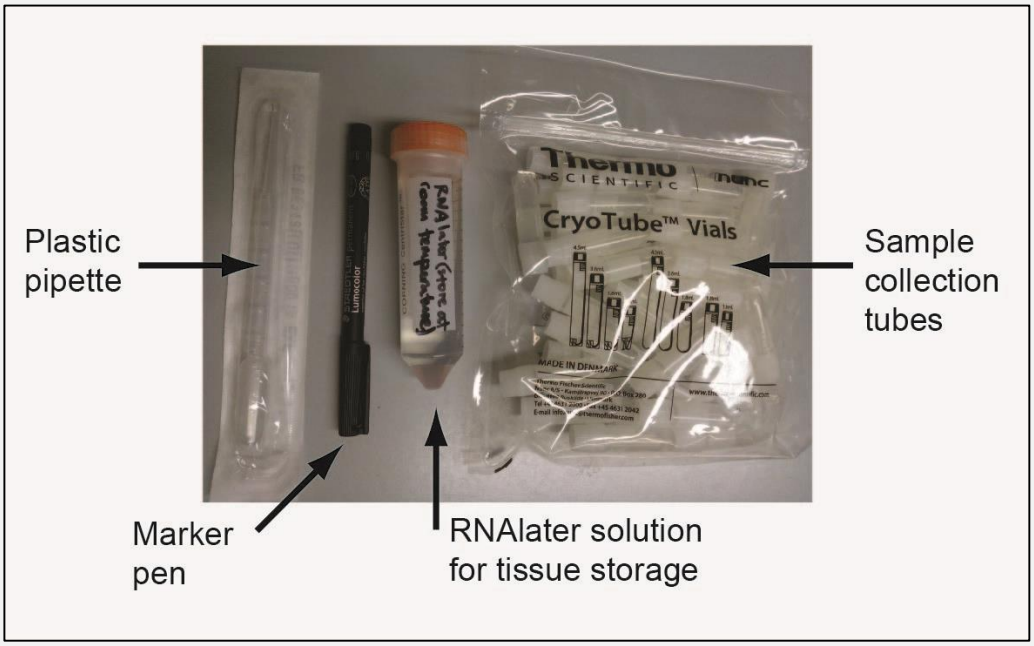
1) Host tissue in RNAlater – gonads during spay/neuter surgery (label #1 Control, ovary/testis, RNA)
2) Photo, if possible
3) Serum – not necessary, but great if possible!

Please, fill in a data collection form with each case (even for control cases).

CTVT PROJECT
SAMPLE COLLECTION AND SHIPMENT

SAMPLE COLLECTION KIT

Sample collection kit contains (photo below): RNAlater solution, 2ml cryo tubes, pipettes, marker pen, sample collection leaflet. To request a sample collection kit, contact Andrea (worldwide) or Debbie (US), and we will post it to you!



SHIPMENT OF SAMPLES

Samples can be shipped at room temperature. We will pay for all the shipping costs associated. Ship samples by **FedEx** and use our account number for the Department of Veterinary Medicine: **156982300**

We have a **UK import permit** - contact **Andrea** (as2112@cam.ac.uk) when you have samples ready for shipment to request a copy of the permit.

Shipping address:
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CTVT PROJECT
SAMPLE COLLECTION PROTOCOL

Canine Transmissible Venereal Tumour

Ideally, collect 5 items for each CTVT infected case:

1) **Tumour in RNAlater** (label e.g. #1 TVT, tumour, RNA)
   Cut a small piece of the tumour (0.5cm3) and place it into small cryovial tube with 2ml of RNAlater
2) **Tumour in formalin** (label e.g. #1 TVT, tumour, formalin)
   Cut a small piece of the tumour (0.5cm3) and place it into small cryovial tube with 2ml of formalin (not provided in the kit)
3) **Host tissue in RNAlater** - gonads (better), skin or blood (mix 2-3ml EDTA blood + 1ml RNAlater) (label e.g. #1 TVT, ovary/testis, RNA)
   Place a small piece of the host sample (0.5cm3) into small cryovial tube with 2ml of RNAlater. Only one of the following samples is sufficient: ovary/testis (optimal), uterus or skin. (If euthanasia, you can collect internal organs). Least favourable, but still possible, is ~2-3 ml of blood in EDTA (purple tube) topped up with 1 -1.5 ml of RNAlater. Mix well.
4) **Photograph**, if possible
   Photograph of the tumour and the dog.
5) Completed **data collection sheet**
   As a minimum, please, record the tumour site and size, sex, age and health status of the dog.

Ideally, collect 3 items for controls = CTVT uninfected cases:

1) **Host tissue in RNAlater** - gonads during a spay/neuter surgery (label e.g. #1 Control, ovary/testis, RNA)
2) **Photograph** of the dog, if possible
3) Completed **data collection sheet**