

## **Vet info for Tissue sample collections for Cavalier King Charles Spaniel health research**

Your client will advise of what tissue they are prepared to donate to these two organisations.

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1)

Tissue samples for the **Animal Health Trust** (AHT) for research in to Episodic Falling (EF), Curly Coat and Dry Eye (CC/DE) and Mitral Valve Disease (MVD) - AHT will have provided on request a bottle of RNALater in advance of the pet's death. The RNALater solution doesn't seem to have a shelf life, and should be kept at ambient room temperature above 15°C otherwise it crystalizes, although it can be melted again.

Although DNA can still be extracted from formalin fixed tissue, it's not much use for downstream genetic processes. The whole idea of using the RNALater solution is to preserve both the RNA & DNA molecules for expression and genomic studies.

The pieces of tissue (brain or heart) should be no thicker than 1 cm to allow the solution to penetrate throughout.

The mutation which causes EF occurs in the Bevican gene which is as far as I'm aware ubiquitous throughout the brain & Central Nervous System (CNS). CC/DE requires skin tissue. Heart murmurs (MVD) research requires heart tissue.

Samples must be sent to the AHT Lanwades Park, Kentford, Newmarket, Suffolk, CB8 7UU

[www.aht.org.uk](http://www.aht.org.uk)

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2)

Tissue samples for **The Cavalier Collection Scheme**, for research into Mitral Valve Disease (MVD), Chiari-like malformation and Syringomyelia (CMSM), and Pancreatitis. Samples and manner of collection will depend on the individual Cavalier's diagnosis.

Samples need to be taken as soon after death as possible. Unfortunately it is not possible to freeze the body and take samples at leisure as freezing ruins most of the tissue samples needed. The samples taken may be preserved in formalin and/or RNALater, depending on what has been possible to arrange before death.

If the Cavalier has not been scanned, the scheme now usually pay for the owner's vet to take the heart and pancreas samples and send them to the researchers.

If the dog has confirmed SM, and the owners agree, we try and arrange that the post-mortem is done by an experienced pathologist at a vet school, so that brain and spinal cord samples can be taken as well. This can be more difficult as some advanced notice is really needed in order to make arrangements with the busy professionals involved.

Contact Margaret at [www.thecavaliercollectionscheme.org](http://www.thecavaliercollectionscheme.org)  
or Dr Penny Watson at Cambridge Vet school

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It might be necessary for the pet owner to drive the deceased pet to the relevant university vet school so that the correct samples can be taken to help the research.

Ashes of the pet are returned to the owner. I had Alfie back in a scatter tube, and found a nice casket for him to sit on the shelf in and watch us from.

**See [www.cavalierepisodicfalling.com/after-they-have-gone](http://www.cavalierepisodicfalling.com/after-they-have-gone)**