



Institut für Genetik, Bremgartenstr. 109a, CH-3001 Bern

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**UNIVERSITÄT
BERN**

Institute of Genetics
Vetsuisse Faculty

Director

Instructions for taking samples for research project on epilepsy

In our research project on the genetics of epilepsy we need to collect as many samples as possible from affected dogs, their relatives, and unaffected unrelated control dogs. For the molecular genetic research experiments we require a blood sample (**5 ml EDTA blood**), which should be taken by a veterinarian. The following information is required together with the samples:

- **name, sex, date of birth and date of sampling of the animal**
- **registry number of the animal**
- **copy of the pedigree certificate (an electronic file is welcome)**
- **diagnosis (please fill questionnaire)**

If specific diagnostic tests were performed, we would appreciate to get copies of the results.

Blood samples should be sent immediately after collection to our laboratory:

Prof. Dr. Tosso Leeb
Institute of Genetics
Bremgartenstr. 109a
3012 Berne
Switzerland

Phone +41 31 631-2326
Fax +41 31 631-2640

The samples may be shipped at ambient temperature and should arrive within 4 days after sample taking at our laboratory. If you are located in Europe regular mail is sufficient. If you are located outside of Europe please use a courier service such as FedEx). We would like to thank you for your valuable cooperation, which is essential for our project. Please do not hesitate to contact us if you have open questions. Thank you for your valuable contribution.

Yours sincerely,

Tosso Leeb

3. General questions about your dog's epilepsy

Age of seizure onset (Please, be as accurate as you can):

Most recent seizure date:

How many seizures has your dog had so far?

Average time between seizures in the beginning of disease?

- times a day
- times a week
- times a month
- times a year

Has the duration and intensity of the seizures (after the beginning of the disease)

- remarkably diminished?
- diminished to some extent?
- remained the same?
- increased?
- remarkably increased?

How long was the time period between the first seizure and beginning of the medication?

- days
- weeks
- months
- years
- Medication began immediately after the first seizure
- The dog has no medication

Are there any triggers you can identify that seem to predispose to the seizures?

- Stress
- Sexual activity
- Weather
- Certain time of day, which?
- Certain season of year, which?
- No predisposing factors
- Other predisposing factors, which?

If your dog is neutered, did the neutering diminish the seizures?

- Yes, the seizures diminished clearly
- Yes, the seizures diminished some
- Neutering had no effect
- No, the seizures increased after neutering

Does your dog act completely normally between the seizures?

- Yes
- No; what is the difference to the normal behavior?

Have the seizures affected dog's normal behavior?

- Yes, how?
- No

Has your dog ever had more than one seizure in 24 hours?

- Yes
- No

If you answered yes, how many seizures has your dog had in 24 hours?

At least seizures

In average seizures

At most seizures

Does your dog have relatives with epilepsy?

- Yes
- I don't know
- No

Please, list here the epileptic relatives of your dog you are aware of (preferably with registered names)

4. Seizures

a) Pre-ictal phase / Prodrome

Period of time: hours to days before the seizure.

In what kind of situations does your dog usually have the seizures?

- In rest
- In asleep
- Awake in normal activity
- In physical stress
- After physical stress
- In mental stress
- When your dog misses you
- After a meal
- After having not eaten for a long time
- When he/she is sick
- In an intense state of feeling (in aggression, fight etc.)
- Seizures happen usually in random situations without any connection to certain states of feeling

Can you predict in advance if your dog is going to have a seizure?

- Yes
- No (*Please, skip to part b*)

What symptoms/changes in normal behavior does your dog show before the seizure?

- Nausea
- Vomiting
- Salivation/drooling
- Dog is restless
- The dog seeks for contact to the owner
- The dog becomes aggressive
- Other; which?

How long before the seizure you are able to see these symptoms?

- Less than 30 min
- 30-60 min
- 1-2 hours
- 2-6 hours
- 6-12 hours
- 12-24 hours
- 1-2 days
- More than 2 days

How often can predict your dog having a seizure?

- Never
- 25% of cases
- 50% of cases
- 75% of cases
- Every time

b) Seizure / Ictal phase

Ictal phase is the time during the seizure and immediately before it starts.

Have you ever observed your dog experiencing a seizure?

- Yes
- No

Have you ever observed a seizure in its entirety from beginning to end?

- Yes
- No

What does your dog do immediately before the seizure?

- Sleeps
- Is awake
- Is having a walk outside
- Plays
- Exercises sports with his owner
- Other, what?

Could you describe in detail the time immediately before the seizure starts?

.....

.....

.....

.....

Have you ever tried to call your dog by name or to take contact with him right before the seizure starts?

- Yes
- No

If you answered yes to the previous question, please describe the state of the dog's consciousness?

- Fully normal (*reacts normally to speech*)
- Abnormal, but not fully absent (*reacts to speech or touching in some way*)
- Fully absent (*Is not responding in any way to speech or touching*)

Approximately how long does a single seizure last? (ignore the pre- and post ictal phases)

Usually the seizure lasts approx. minutes
The shortest seizure lasted approx. minutes
The longest seizure lasted approx. minutes

Description of the seizure:

Estimate how typical the following options are in a case of your dog's seizures. (Please, answer all questions).

In the box preceding the description of symptom, please number the actual order of symptoms appearing. If more than one symptom occurs simultaneously, you may use the same number.

- | | | | | |
|--|---------------------------------|--------------------------------|---------------------------------|--------------------------------|
| <input type="checkbox"/> Stiffening of neck and limbs | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom | <input type="checkbox"/> Never |
| <input type="checkbox"/> Falling | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom | <input type="checkbox"/> Never |
| <input type="checkbox"/> Muscle fasciculation | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom | <input type="checkbox"/> Never |
| <input type="checkbox"/> Tremor | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom | <input type="checkbox"/> Never |
| <input type="checkbox"/> Twisting head | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom | <input type="checkbox"/> Never |
| <input type="checkbox"/> Twisting facial muscles | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom | <input type="checkbox"/> Never |
| <input type="checkbox"/> Urination | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom | <input type="checkbox"/> Never |
| <input type="checkbox"/> Defecation | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom | <input type="checkbox"/> Never |
| <input type="checkbox"/> Temporary cease in breathing | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom | <input type="checkbox"/> Never |
| <input type="checkbox"/> Drooling | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom | <input type="checkbox"/> Never |
| <input type="checkbox"/> Dilation of pupils | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom | <input type="checkbox"/> Never |
| <input type="checkbox"/> Chewing | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom | <input type="checkbox"/> Never |
| <input type="checkbox"/> Change posture | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom | <input type="checkbox"/> Never |
| <input type="checkbox"/> Chasing tail | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom | <input type="checkbox"/> Never |
| <input type="checkbox"/> Moving in circles | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom | <input type="checkbox"/> Never |
| <input type="checkbox"/> Temporary unconsciousness | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom | <input type="checkbox"/> Never |
| <input type="checkbox"/> Staring | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom | <input type="checkbox"/> Never |
| <input type="checkbox"/> Trying to get near people | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom | <input type="checkbox"/> Never |
| <input type="checkbox"/> Bumping into furniture's etc. | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom | <input type="checkbox"/> Never |
| <input type="checkbox"/> Temporary loss of vision | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom | <input type="checkbox"/> Never |
| <input type="checkbox"/> Barking | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom | <input type="checkbox"/> Never |
| <input type="checkbox"/> Fear | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom | <input type="checkbox"/> Never |
| <input type="checkbox"/> Aggressiveness | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom | <input type="checkbox"/> Never |

Are your dog's seizures all alike?

- Yes
- No

Have you ever had the impression that one part or side of his/her body behaves differently from the rest of his/her body during a seizure? For example twisting more strongly etc.

- Yes, how?
- No

Have you been able to influence in the way the seizure proceeds?

- Yes, how?
- No

c) post-ictal phase

period of time: minutes to hours to days after the seizure

Do you think your dog realizes what has happened after a seizure?

- Yes
- No
- Why?

Are you afraid of his/her reactions after a seizure?

- Yes
- No
- Why?

Can he/she respond when you call his/her name after a seizure?

- Yes
- No

Have you ever asked him/her to do a task after a seizure?

- Yes
- No

If yes, what happened?

- The dog obeys normally
- The dog obeys, but acts abnormally
- The dog doesn't obey

Please describe anything you notice in the minutes, hours and days after a seizure, and when this occurs relative to the seizure.

- Dog is tired
- Dog wanders around
- Dog is aggressive
- Dog drinks
- Dog eats
- Dog wants to go out
- Dog don't want to get up
- Dog is vomiting or retching
- Else, what?

How long does your dog take to return to normal after a seizure?

- Less than 5 minutes
 - 5-15 minutes
 - 15-30 minutes
 - 30-60 minutes
 - 1-2 hours
 - 2-6 hours
 - More than 6 hours
 - The dog behaves normally right after the seizure
-
-

5. Veterinarian's clinical tests and dogs health condition

Has a veterinarian diagnosed your dog with epilepsy?

- Yes
- No

Where any additional clinical tests made when the diagnosis was done?

- Blood test Yes No
- Electro-encephalogram (EEG) Yes No
- Scan with cerebrospinal fluid (CSF) Yes No
- Computerized tomography(CT) Yes No
- Magnetic resonance imaging (MRI) Yes No
- Other clinical investigations Yes No

If yes, please specify

Does your dog currently have any other serious health problems besides seizures?

- No
- Yes, please specify

Other relevant medical history:

- No
- Yes, please specify

Questions for female dogs

What was your dog's age when she was in heat at the first time?

Is she in heat regularly (if she is sterilized, was she regular before that)?

- Yes
- No

Does your dog have offspring?

- Yes, how many litters?
- No

Questions for male dogs

Does your dog show normal sexual behavior?

- Yes
- No, how is it abnormal?

Does your dog have offspring?

- Yes, how many litters?
- No

Do you have knowledge of your dog's birth?

- Yes
- No (*Skip to part epilepsy medication*)

What was your dog's birth weight ?

Did your dog need special help from human during the first weeks of his life ?

- Yes, please specify
- No

Were there any difficulties related to your dog's birth?

- No
 - Yes, please specify
-
-

6. Questions on epilepsy medication

Is your dog taking any medication, supplements or other treatments to control the seizures?

- Yes
- No

When did you start giving the medication?

Current medication(s):

Medicine 1: **Medicine 2:**

Dosage 1: **Dosage 2:**

How often does he/she get medicine 1?

- Once a day
- Twice a day
- Three times a day
- Four times a day

How often does he/she get medicine 2?

- Once a day
- Twice a day
- Three times a day
- Four times a day

Does your dog receive the medicine(s) routinely?

- Yes
- No; Why and on what basis is he getting the medicine?

Have the blood levels of the medicine(s) been taken?

- Yes, results:
- I don't know
- No

How effective has the medication been in controlling the seizures?

- The medication has stopped the seizures completely
- The medication has reduced the number of seizures in half
- The medication has reduced the number of seizures a little
- The medication has not reduced the number of seizures at all

Has the medication eased off the seizures?

- Yes, how?
- No

Does the medication affect your dog's working abilities?

- Yes
- No

Do you medicate your dog during the seizures?

- Yes, What medicine and what dosage?
- No

Have you noticed the medicine to have any side effects?

- I haven't noticed any side effects
- Sleepiness
- Vomiting
- Increased drinking
- Staggering
- Other, please specify

Have you been giving any herbal treatments, nutritional supplements, or other therapies for the epilepsy?

- No
- Yes, please specify

If yes; what treatments and for how long? Have you noticed any results?

7. Other

If you have any additional information which you think might be useful, include them below

Please return questionnaire by mail or e-mail to

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