Questionnaire: Diagnosis and Treatment of Endometritis in Mares in Germany

SC: single-choice question

MC: multiple-choice question

1. General Data
	1. For how long are working as a veterinary practitioner? (SC)
		* 1-2 years
		* 3-5 years
		* 6-10 years
		* 11-20 years
		* 21-30 years
		* More than 30 years
	2. Indicate the State Chamber of Veterinarians to which you belong? (SC)
		* Baden-Wuerttemberg
		* Bavaria
		* Berlin
		* Brandenburg
		* Hesse
		* Mecklenburg- Western Pomerania
		* Lower Saxony
		* North Rhine
		* Rhineland-Palatinate
		* Saarland
		* Saxony-Anhalt
		* Thuringia
		* Westphalia-Lippe
	3. What is the type of practice, you are working for? (SC)
		* Single practice
		* Mixed practice
		* Clinic
		* Stud farm
		* Other
			+ comment box
	4. What is the proportion of equine reproductive medicine in your practical work? (SC)
		* Less than 10%
		* 11-20 %
		* 21-30 %
		* 31-40 %
		* More than 40 %
	5. Which services for equine reproductive medicine do you offer? (MC)
		* Management of natural mating
		* Artificial insemination
		* Embryo transfer
		* Ovum pick-up
		* Stud farm practice
	6. How many mares are you managing per year? (SC)
		* Less than 20
		* 21-40
		* 41-70
		* 71-100
		* 101-150
		* 151-200
		* More than 200
2. Diagnostic Procedures for Endometritis
	1. Which form of endometritis do you encounter most of the times? (SC)
		* Chronic infectious endometritis (CIE)
		* Venereally transmitted endometritis (e.g. CEM)
		* Persistent-breeding induced endometritis (PBIE)
		* Other
			+ Comment box
	2. Do you take uterine samples for microbiological examination? (SC)
		* Yes
		* No
			+ If 2.b. was “No”:
				- How do you determine the form of endometritis alternatively?

Comment box

* + - * If 2.b. was “Yes”:
				+ Which technique do you use routinely for bacteriological sampling of the uterus? (SC)

Swab with speculum

Double guarded swab without speculum

Double guarded swab with speculum

Low-volume lavage

Biopsy

Cytology

* + - * + What is your preferred cycle stage for uterine sampling? (SC)

Anestrus

Diestrus

Estrus

No preference

* + - * + In which mares do you perform uterine sampling routinely? (MC)

Young maiden mares (3-4 years old)

Older maiden mares (older than 4 years of age)

Foaling mares

Barren mares

Slipped mares

Mares after abortion/resorption

Mares with a history of dystocia

Other:

Comment box

* + - * + Rank the infectious agents according to their incidence within your uterine samples:

α-hemolytic Streptococci

ß-hemolytic Streptococci

E. coli

Pseudomonas ssp.

Klebsiella ssp.

Enterococcus ssp.

Yeast (e.g. Candida ssp.)

Mould (e.g. Aspergillus ssp.)

* 1. What is the percentage of multi-resistent bacteria in microbiological samples obtained from your patient material?

0%

1-5%

6-10%

11-20%

More than 20%

* 1. Do you perform endometrial biopsies as an additional diagnostic tool for endometritis? (SC)
		+ Yes
		+ No
1. Management of CIE
	1. How do you treat mares with a positive uterine culture routinely? (SC)
		* Systemic antibiotic treatment
		* Intrauterine antibiotic treatment
		* Without antibiotics
			+ If 3.a. was “Systemic antibiotic treatment”:
				- Which antibiotic drug / combination of antibiotic drugs do you use most of the times? (SC)

Trimethoprim-sulfadiazine

Procaine penicllin G

Gentamicin

Procaine penicillin G / Gentamicin

Ceftiofur

Other:

Comment box

* + - * + How long do you treat mares with a positive uterine culture on average? (SC)

One day

2 days

3 days

4 days

5 days

6 days

7 days

More than 7 days

* + - * If 3.a. was “intrauterine antibiotic treatment”:
				+ Which antibiotic drug do you use most of the times? (SC)

Amoxicillin pills

Other:

Comment box

* + - * If 3.a. was “intrauterine antibiotic treatment” or “systemic treatment:
				+ On which criterion is your usual treatment duration depending? (SC)

Infectious agent

Clinical signs

Degree of infection according to microbiology

Other:

Comment box

* 1. Do you perform uterine lavages routinely in CIE cases? (SC)
		+ Yes
		+ No
		+ No, only exceptionally
			- If 3.b. was “Yes” or “No, only exceptionally”:
				* What do you use for uterine lavages? (MC)

0.9 % saline

Tap water

Ethacridin lactate solution

Diluted iodine solution

DMSO

Diluted chlorhexidine solution

N-acetylcysteine

Coca Cola

Kerosene

Other:

Comment box

* 1. Do you use oxytocin for CIE treatment? (SC)
		+ Yes, routinely
		+ No, never
		+ Only when presence of echogenic was detected ultrasonographically
		+ After every uterine lavage
	2. Do you perform vulvoplasty surgery in cases of poor vulvar closure? (SC)
		+ Always
		+ Often
		+ Only if clinical signs are present
		+ Rarely
		+ Never
	3. Do you perform control sampling after completion of CIE treatment? (SC)
		+ Yes
		+ Yes, mostly
		+ No, only exceptionally
		+ No
	4. According to your experience, how many mares get pregnant after treatment of CIE? (SC)
		+ Per cycle:
			- Less than 10 %
			- Less than 30 %
			- Less than 50 %
			- Less than 70 %
			- Less than 90 %
		+ Per season:
			- Less than 10 %
			- Less than 30 %
			- Less than 50 %
			- Less than 70 %
			- Less than 90 %
1. Management of PBIE
	1. According to your experience, which mares are susceptible to PBIE? (MC)
		* Young maiden mares (3 to 4 years old)
		* Older maiden mares (older than 4 years of age)
		* Foaling mares
		* Barren mares
		* Slipped mares
		* Mares with a history of abortion/resorption
		* Mares with a history of PBIE
		* Older mares with one or more foals
		* Other:
			+ Comment box
	2. How long after detection of ovulation do you perform uterine lavages? (SC)
		* Until 1 day after ovulation (post ov.)
		* Until 2 days post ov.
		* Until 3 days post ov.
		* Until 4 days post ov.
		* Until 5 days post ov.
		* Until 6 days post ov.
		* Longer
	3. According to your experience, how many mares get pregnant after treatment of PBIE? (SC)
		* Per cycle:
			+ Less than 10 %
			+ Less than 30 %
			+ Less than 50 %
			+ Less than 70 %
			+ Less than 90 %
		* Per season:
			+ Less than 10 %
			+ Less than 30 %
			+ Less than 50 %
			+ Less than 70 %
			+ Less than 90 %
2. Abandoned diagnostic and treatment procedures
	1. Which diagnostic methods for endometritis did you give up?
		* Comment box
	2. Which treatment methods for endometritis did you give up?
		* Comment box