## **Treating Fungal Infections in Mares (AAEP 2012)**

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Fungal infections of the uterus, due to either yeast or mold, are less common than bacterial infections, but it's important to consider them because untreated infections can lead to fertility problems. In such cases prompt diagnosis and treatment are necessary for a positive outcome A veterinarian from The Ohio State University recently described approaches to detecting and eliminating fungal infections at the 2012 American Association of Equine Practitioners' Convention, held Dec. 1-5 in Anaheim, Calif.

"There is an array of fungal organisms that can infect a mare's uterus, but only a limited number of laboratories that routinely perform antifungal susceptibility testing," explained Marco Coutinho da Silva, DVM, PhD, Dipl. ACT, of the university's College of Veterinary Medicine.

Familiarity with the most common fungi infecting the mare reproductive tract and their respective drug susceptibilities will likely help veterinarians recognize fungal endometritis more readily and improve treatment efficacy.

Coutinho da Silva added, "This is particularly important when practitioners need to start empiric treatment (initiation prior to reaching a firm diagnosis) before culture results are complete."

From 1999 to 2011, researchers isolated 102 fungi, most commonly yeast, from 92 mares. Almost 100% of tested fungi were susceptible to a class of drugs called "polyenes," which are broad-spectrum antifungal agents. Examples of polyenes include amphotericin B, natamycin, and nystatin.

In addition, the study authors found:

- Most fungi (between 47% and 81%) also responded to treatment with medications from the azole class (e.g., ketakonazole, itraconazole, miconazole);
- Yeast were 100% susceptible to polyenes and least susceptible to miconazole; and
- Susceptibility patterns of particular types of molds (septate molds, the second most common type of fungi isolated from mares' uteri) were quite variable, and none of the mold organisms were susceptible to fluconazole.

"Before therapy is initiated, the practitioner should consider not only the susceptibility pattern of the microorganism but also the safety of each drug and route of administration," concluded Coutinho da Silva. "For example, fluconazole is a very safe drug that can be administered orally, intravenously, or locally and has a good efficacy against yeast. That's my drug of choice for yeast infections."

The full-length study, published in a supplement to the *Equine Veterinary Journal*, is available free online and contains multiple tables with treatment recommendations, doses, and administration routes, among other information practitioners might find useful for treating fungal disease.

Disclaimer: Seek the advice of a qualified veterinarian before proceeding with any diagnosis, treatment, or therapy.