

EXPERIENCES WITH F10 IN EQUINE PRACTICE

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Introduction

I have used F10 products to treat a variety of conditions in the horse and as a disinfectant. The following are brief descriptions of some specific cases where I incorporated F10 into the treatment plan.

Case 1: Dermatophytosis (Ringworm) infection in a 2yo colt

Common causes of this highly contagious infection are; *Trichophyton equinum*, *T. mentagrophytes*, *T. verrucosum*, *Microsporum gypseum* and *M. Canis*. Infection is from contact with viable spores and the incubation period is one to four weeks. The disease is self-limiting and the lesions regress over a period of weeks. Treatment does not shorten the course of the disease, but is crucial in limiting the spread of the infection to other horses.



Fig 1. *Microsporum* lesion on the right neck of a 2yo colt.



Fig 2a. *Microsporum nanus*.

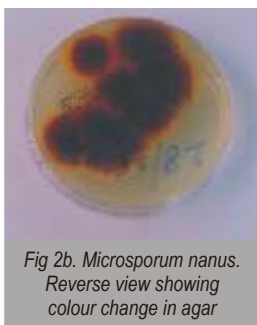


Fig 2b. *Microsporum nanus*. Reverse view showing colour change in agar

Since I received the F10 supplies there has been an outbreak of ringworm in our stable. The case presented as an explosion of painful, urticarial type lesions over the right neck and shoulder on a 2yo colt (Fig 1). A second cluster of lesions appeared on the horse's rump five days later. Culture of hair plucks on mycological agar (containing cyclohexamide and chloramphenicol) resulted in the growth of *Microsporum nanus* (Fig2a &2b). Microscopic examination revealed the characteristic pear-shaped, two cell macroconidia of *Microsporum nanus* (Fig 3).

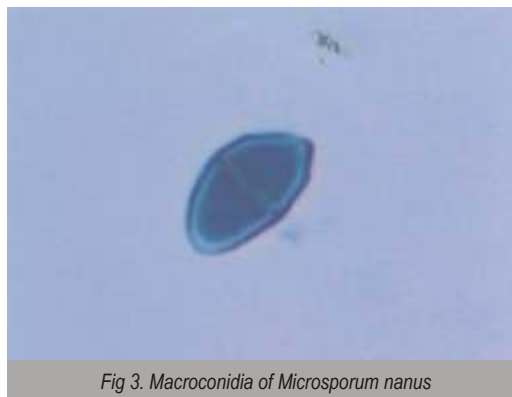


Fig 3. Macroconidia of *Microsporum nanus*

Common treatments for ringworm involve bathing the horse with enilconazole, povidone iodine or chlorhexidine shampoo and treating the environment with fogging or spraying with enilconazole or potassium monopersulphate. The treatment in this case consisted of:

1. Bathing the horse with F10 shampoo (F10 Germicidal Treatment Shampoo) (Fig 4a) and leaving to stand for 15 minutes before washing off. Following this, F10 ointment (F10 Germicidal Barrier Ointment) was applied to the individual lesions (Fig 4b). The ointment was applied each day and the horse was shampooed every other day for two weeks. Other horses handled by the same groom were also bathed with F10 shampoo.
2. All grooming equipment for this horse was soaked in a 1:250 solution of F10 (F10SC Veterinary Disinfectant) each day for half an hour.
3. The bedding in the horse's stable was changed and the stable disinfected with a garden sprayer containing a 1:250 solution of F10.
4. The tack room was fogged for 20 minutes on several occasions using a 1:250 solution of F10.

No other cases appeared in the stable and the lesions on the affected horse slowly resolved over six weeks.



Fig 4a. Bathing horse with F10 Shampoo



Fig 4b. F10 ointment on individual ringworm lesions

Case 2: Venereal infection in a stallion

Routine pre-breeding swabs (prepuce, urethra and urethra fossa) from an eight-year-old stallion's penis revealed heavy growths of *Pseudomonas aeruginosa*. The stallion had covered mares the previous season in an area near Riyadh where mares and stallion are not routinely screened for potential venereal pathogens.

Stallions with this infection must be treated, as all strain isolates are potential causes of venereal disease. Conventional treatment is to thoroughly wash the penis and prepuce for ten days with an antiseptic soap and water to remove smegma and then to spray with a 1% silver nitrate solution. These infections are difficult to treat.

This case was treated by thoroughly washing the penis and prepuce for seven days with a 1:250 solution of F10 (F10SC Veterinary Disinfectant) followed by thoroughly spraying with a 1:250 solution of F10. Swabs collected ten days after treatment showed no growth of *Pseudomonas aeruginosa*. The stallion did not cover any mares following treatment, but this was due to reasons unrelated to this infection.

Case 3: Pedal osteitis in a foal

A three-month-old foal gradually developed severe hind limb lameness after being treated unsuccessfully for a foot abscess. Radiographs revealed a pedal osteitis (Fig 5a & 5b). The infected pedal bone was curetted and the area irrigated thoroughly with a 1:250 solution of F10 (F10SC Veterinary Disinfectant). Following surgery, the large defect in the sole of the foot was packed with sterile swabs soaked in F10 ointment (F10 Germicidal Barrier ointment). The foal was medicated with 5mg/kg ceftiofur twice daily for 14 days. Each day the bandages on the foot was changed and the cavity irrigated with F10 solution and the repacked with F10 ointment soaked swabs. Over several weeks the cavity reduced in size and the sole of the foot healed. The foal made a complete recovery.

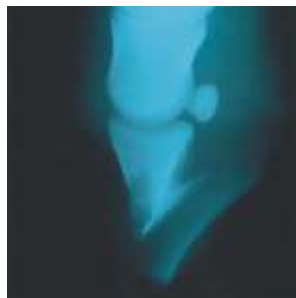


Fig 5a. Lateral view of the pedal bone



Fig 5b. Dorso 60 proximal-plantar distal oblique view of the pedal bone

General Use of F10 products

I have used the F10 (F10SC Veterinary Disinfectant) most frequently for:

1. Disinfecting surgical instruments in the field. The most common example would be during reproductive work when the instruments are cleaned, then disinfected with 1% F10 solution between Caslick operations on mares.
2. Irrigation of wounds. I have been using a 1:250 solution of F10 as my standard large lavage solution on fresh wounds before primary closure. I typically use large volumes of fluid administered through a hand-held pump-type garden sprayer, where a pressure of at least 10psi can be achieved to remove bacteria and particulate matter. Older wounds that are to heal by second intention have been irrigated as above and then packed with F10 ointment (Fig 6a and 6b) before applying a sterile dressing and bandage.
3. Between endoscopic examinations of horses I have been disinfecting the endoscope in an F10 solution. My standard procedure is to initially clean the scope under tap water and flush the biopsy channel. This is followed by submerging the scope in a tube containing a 1:250 solution of F10 for five minutes and then wiping the length of the scope with surgical alcohol.
4. Other applications have included; soaking hooves in F10 solution after abscess debridement, disinfecting tooth instruments between horses and disinfecting non-disposable vaginal speculums between mares in the field.



Fig 6a. Three day old pastern wound after irrigating with F10 solution



Fig 6b. Pastern wound packed with F10 Ointment before bandaging

References

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