# **Cambridge Equine Hospital**

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## **Reproductive Services**

## **Pre-Breeding Assessment**

This includes assessment of the mare's suitability for breeding and advice on how to proceed. Pre-breeding swabbing for venereal diseases and blood testing for EVA is required by many studs. A pre-breeding check should be carried out early in the season to identify any problems that could affect the mare's ability to conceive. The gynaecological examination includes an inspection of the vulva, vagina and cervix, and an ultrasonographic examination per rectum of the uterus and ovaries. We can also carry out endometrial swabs of the uterus to check for infection which may lower fertility.

## **Management of Mares Being Covered Naturally**

As well as the pre-breeding assessment, we can also scan the ovaries and uterus to establish the most appropriate time for covering. If required, we can also manipulate the mare's natural reproductive cycle to bring her into season at a certain time.

#### **Artificial Insemination**

A.I. is a common method used for non-Thoroughbred breeding throughout Europe and America and has several advantages:

- Increased choice of stallions available
- Semen delivered to clinic avoiding transport of mare to stud
- Greatly reduced risk of injury to mare, stallion and handlers
- Decreased spread of certain diseases
- Increased conception rates in mares susceptible to uterine inflammation (endometritis)

Freshly chilled semen provides the easiest and most successful methods of A.I. However, using frozen semen does allow access to many foreign stallions. Successful A.I. relies on the mare being inseminated at exactly the right point in her season. This requires repeated ultrasound scan of the ovaries and uterus to identify the appropriate timing. We encourage hospitalisation of the mare to facilitate this. It is especially important when using frozen semen as the timing of insemination is even more crucial, often requiring the mare to be scanned four times daily.

#### **Pregnancy Diagnosis**

We advise a first scan at 14-16 days post ovulation to establish whether the mare is pregnant, and if so, whether there is any evidence of possible twinning. A second examination is advisable at 25–26 days post mating to check for normal development of the foetus. A pregnancy check can be done in the autumn to confirm the pregnancy is progressing satisfactorily. A management plan for the pregnant mare can then be devised. Blood tests are also available to determine pregnancy from day 40 onwards.



Rectal scan showing 15 day pregnancy

## **Management of the In-Foal Mare**

Routine vaccination and worming of the in-foal mare is imperative. Mares are vaccinated against Influenza and Tetanus. This will also afford the foal some immunity if a booster is given in the last 6 weeks of pregnancy. Vaccination against Equine Herpes Virus is recommended at 5,7 and 9 months of pregnancy to reduce the risk of abortion. We are happy to give advice on all aspects of the pregnant mare including dietary requirements and foaling itself.

#### **Post-Foaling Checks**

It is sensible to examine the mare and foal after foaling to check for complications. The afterbirth, or placenta, which should have been expelled within a few hours of foaling, is examined to check that it has come away completely. The mare's vulva and vagina are examined for tears. Her udder is also checked for adequate colostrum, which is the vital first milk for the foal. We examine the foal to see that it is healthy and strong and has stood and nursed, and that it has no medical problems. A blood test can be performed on the foal to assess its immune status in response to colostrum intake. Advice on the management of the foal in the first few weeks of life can be given at this stage.

#### **Reduced Fertility in the Mare**

Unexplained, persistent failure to conceive can be investigated at the hospital. The reproductive tract will be thoroughly examined with ultrasound. In addition, we can perform swabs and smears of the lining of the uterus and biopsies can be taken to give us further information. We can also pass an endoscope into the uterus.

With anyone who is new to breeding, we advise that you contact us early in the season to discuss what will be involved and when. If you have questions, please do not hesitate to contact us on: 01223 760535 or email: cambridgeequine@vet.cam.ac.uk