



BLEEDING AT MATING OR SEMEN COLLECTION

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The presence of blood on the penis of a stallion as he dismounts a mare is not common. However, it is very disconcerting to a horse owner when it does occur. One of the first questions that must be answered in such a case is whether the blood is from the stallion or the mare.

A vaginal speculum examination can be performed on the mare to determine if she has sustained an injury during breeding. The most common sites of bleeding from a mare after being bred are a perforated hymen in a maiden mare, a vaginal varicose vein in a middle-aged to older mare, or a laceration to the cervix or the front wall of the vagina.

The hymen is a thin membrane that separates the vestibule from vagina and is located just in front of the opening to the bladder. The hymen is typically disrupted or broken when a mare is first bred by either natural cover or by artificial insemination. Transient bleeding occurs when the membrane is disrupted and the small blood vessels within it are broken. The bleeding stops after a few minutes and does not re-occur with subsequent breedings.

Vaginal varicose veins are blood vessels which are usually located at the junction of vestibule and vagina in middle-aged or older mares. Vaginal varicose veins may

spontaneously rupture (i.e. without any mechanical pressure) or may rupture and bleed after breeding or insemination. Fortunately, the bleeding is not life-threatening and lasts for only a few minutes or hours. Vaginal bleeding from a ruptured varicose vein should be differentiated from more serious conditions, such as a vaginal perforation sustained during mating (see below) or premature separation of the placenta in a pregnant mare. Treatment of a ruptured vaginal varicose vein is usually not needed as the condition is most often self limiting. Rarely topical medical treatment or surgical ligation is required to control bleeding and/or prevent recurrence.

Lacerations to the front of the vagina during natural mating, also called 'breeding accidents', are not as uncommon as one may presume. Blunt pressure from the stallion's penis may cause a tear in the front wall of the vagina, adjacent to the cervix. In some instances, the tear is full thickness and an opening is created directly into the abdominal cavity. Affected mares may develop moderate to severe inflammation or infection of the abdominal cavity, termed peritonitis, and should receive immediate medical attention. Diagnosis of a vaginal laceration may be made by either a vaginal speculum exam or a manual examination of the vaginal vault.

Stallions may bleed during the mating process from one of four main locations. A small lesion may be present on the end of the penis. Most often a small laceration is sustained on the edge of the glans penis by friction against a few tail hairs during mating. A second potential site of bleeding is the distal urethra. Bleeding may be caused by a small laceration, summer sores lesion or a skin cancer lesion (squamous cell carcinoma). These sites are readily detected by direct observation of the end of the penis. However, active bleeding may not be present unless a full erection is present. Another site of bleeding during mating or semen collection is from an erosive lesion high up within the urethra of the stallion. Such lesions are typically only visualized by examination using a flexible endoscope passed up the urethra with the stallion sedated. Urethral lesions that result in blood loss during ejaculation (hemospermia) are usually managed by either sexual rest for several weeks, medical therapy or, in some instances, surgery. The fourth site of blood loss by the stallion during mating is the seminal vesicles. Inflammation of the seminal vesicles, also called seminal vesiculitis, due to bacterial infection may result in the presence of blood within the gel fraction of the ejaculate.

Collection of semen with an open-ended artificial vagina may be needed to determine the time course of bleeding into the ejaculate. Bleeding that occurs prior to or during ejaculation is usually due to lesions of the glans penis or urethra. Blood contamination that occurs at the end of ejaculation is typically due to seminal vesiculitis.

Accurate and early diagnosis of the source of blood (i.e. mare or stallion and location of the lesion) is critical to determine both a prognosis and the optimal course of management or therapy. Owners or farm managers are advised to consult with their veterinarian if significant bleeding occurs from either the mare or stallion during a natural breeding or a semen collection attempt.