Use of a Buhner Needle to Place Minchev Sutures for Vaginal/Cervical Prolapse Retention

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The use of the Minchev technique for prolapse retention is a simple, yet effective means of preventing the reoccurrence of vaginal/cervical prolapses in the bovine species. At least two methods have been proposed to place the retention sutures, but I have used the Modified Buhner needle as a yet-simpler means of placing these button sutures.

After replacement of the vaginal/cervical prolapse I hand-bend the shaft of the needle to an approximate angle of 45° before carrying the needle into the vagina. The internal iliac artery, lying ventral to the sacro-sciatic ligament, can easily be palpated through the vaginal wall. Because of its loose attachment it can be moved and held laterally while the Buhner Needle is forced through the dorso-lateral aspect of the vagina, the sacro-sciatic ligament, gluteal muscles and the skin. It is imperative to insure that this artery is not penetrated by the passage of the Buhner Needle.

Umbilical tape (¼ inch, saturated with Furacin® solution) or Buhner tape is threaded through the eye of the needle, then the needle and tape withdrawn into the vaginal canal and from between the vulvar lips. The umbilical tape is withdrawn from the eye of the needle and threaded through two holes in a plastic “button”; I use lids from plastic dispensing vials. The tape is then rethreaded through the eye of the Buhner Needle and carried back into the vagina, where it is forced externally to penetrate the gluteal area about 2 cm. medial to the site of previous penetration. The tape is withdrawn from the needle and tied tightly over a roll of gauze that suffices for the external “button.” The procedure is repeated on the opposite side to retain the vaginal tissue by these bilateral, “Minchev” sutures. The two rolls of gauze are saturated with an iodine solution and antibiotics are administered prophylactically.

The sutures are removed in about six weeks, but no attempt is made to remove the intra-vaginal “buttons,” as they will be expelled in the future. During this interval sufficient fibrous tissue will have developed around the sutures to prevent reoccurrence of the condition.

Portable Surgery Tray and Sternal Recumbency: Aids to Uterine Prolapse Replacement

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Over the past fifteen years I have learned two things which have greatly reduced my efforts in replacing a uterine prolapse in the bovine species. The first is in positioning the animal in sternal recumbency, with the rear limbs pulled posteriorly, hocks dorsal. This alters the natural angle of the pelvis and in itself will facilitate replacement.

More importantly, the rear limbs proximal to the hocks now provide support for a portable, fiberglass surgery tray, from our Bowie mobile unit. The prolapsed uterus is placed on the clean, raised surface of the tray for cleansing and treatment of the exposed, edematous organ. Not only do I not have to rely on myself or others to support the uterus during my replacement efforts but the uterus has now been raised almost to the level of the vulva. I can now concentrate solely on replacing the uterus through the vulvar lips and vagina to its normal position in the abdominal cavity.