Sample Collection Notes for Trichomoniasis Tests

For the preparation of tubing for the preputial wash (bulls) and vaginal lavage (cows), polythene tubing or a similar product with internal diameter 4 mm, external diameter 6 mm is required. For obtaining preputial wash samples from the bull, a length of about 20 cm is cut and the end is made blunt by gentle heat in a flame (Care – some tubing may be flammable). For samples from the cow a length of about 45 cm is closed at one end by gentle heating in a flame. In the 3 cm of tubing adjacent to the closed end, make about 16 small holes at various parts of the circumference. This tubing should be sterilised before use.

1. SAMPLE COLLECTION FROM BULLS

Preputial Washings

1.1 The quality of sample is vitally important to the successful diagnosis of Trichomonas infection. As some infected bulls carry comparatively small numbers of the organism, a strenuous physical effort should be used to liberate them from the folds of preputial and penile mucosa.

1.2 The bull should be restrained so that the operator is safe and has room to move.

1.3 If the preputial orifice is grossly dirty, the hairs should be clipped, the orifice gently washed with detergent and dried with clean towels.

1.4 Draw about 30 ml of warmed sterile Phosphate Buffered Saline (PBS) into a 50 ml disposable syringe and attach the tubing.

1.5 Before inserting the tube through the preputial orifice, massage the preputial cavity to remove any air. (This helps in the recovery of the fluid).

1.6 Introduce the tube into the preputial cavity to a distance of 15-20 cm (6-8 inches). Seal the orifice by gripping above the tubing with the fingers of one hand. Inject the PBS into the prepuce. The tubing and syringe should remain in situ during massage.

1.7 With the free hand briskly massage the fluid within the preputial cavity. About 100 vigorous massage movements should be carried out, concentrating on an area between 23 and 46 cm (9 and 18 inches) behind the orifice.

1.8 Gently withdraw the fluid back through the tube into the syringe. Recovery of fluid will be aided by massaging the prepuce towards the preputial orifice, and maintaining slight negative pressure in the syringe whilst slowly withdrawing the tube.

1.9 Transfer the sample to a universal bottle – the bottle that originally contained the sterile PBS may be used.

NB: If less than 15 ml of fluid is recovered, or the sample is grossly diluted with urine, the procedure should be repeated.

2. SAMPLE COLLECTION FROM COWS

Vaginal lavage

2.1 The cow should be restrained so that the operator is safe and has room to move.

2.2 If the vulva is grossly dirty, the hairs should be gently cropped and the external surface gently washed with detergent and dried with clean towels.

2.3 The volume of mucus in the vagina varies with the stage of the oestrous cycle, being greatest at oestrus. At other times the mucus is thicker, less voluminous and tends to adhere tightly to the walls of the vagina.

2.4 Fit the perforated tube to a 50 ml disposable syringe.

2.5 Fill the syringe and tube with 20-30 ml of PBS so that the air is excluded.

2.6 Insert the free end of the tube into the vagina as far as the cervix. Expel the PBS into the vagina with some force.

2.7 Draw the liquid back into the syringe and repeat the process several times. Withdraw the fluid by applying a gentle vacuum with the syringe. It may be necessary to move the tube backwards and forwards along the floor of the vagina to find where the liquid has lodged. It should be possible to recover at least as much fluid as has been introduced.

2.8 Transfer the sample back into the emptied PBS universal container.

Samples must be received in the laboratory within 24 hours and MUST NOT be refrigerated.

FAIR PROCESSING NOTICE

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