ABSTRACT

This short communication aims to put on record a rare case of coexisting nabothian and endometrial cysts in a water buffalo.

Keywords: cervical cyst, endometrial cyst, buffalo

INTRODUCTION

Nabothian cysts are mucus filled tiny lumps seen on the surface of cervix. The condition has been reported infrequently in buffaloes (Rao, 1991). Apart from the cervix, cysts have been reported in other portions of the genital tract including endometrium in livestock (Paccamonti and Pycock, 2009). These cystic affections of genital tract may lead to infertility in the species, already beset with many inherent problems in reproduction (Das and Khan, 2010). The objective of the present communication is to report a case of nabothian and endometrial cysts in a water buffalo.

CASE HISTORY AND OBSERVATION

A case of nabothian and endometrial cysts was observed in a buffalo genital tract procured from a local slaughter house, Bareilly, UP. An oval cyst of cervix with a larger diameter of 2.7 cm and a smaller diameter of 1.6 cm, containing cloudy white coloured mucoid fluid was seen at the internal os (Figure 1). The cyst appeared to block the lumen of the cervix. Further investigation revealed the presence of tiny (0.5-2.5 mm diameter), white coloured fluid filled cysts throughout the uterus (Figure 2). The cysts were uniformly distributed on both uterine horns, particularly over the caruncles and to a lesser extent in the inter-caruncular region.

DISCUSSION

The buffalo has a high productive potential but its productivity is limited by several reproductive problems leading to infertility (Das and Khan, 2010). Infertile buffaloes become an economic liability for the farmer and are more often than not culled or slaughtered. Cystic affections of the genital tract contribute to infertility in animals. Cervical cysts varying in size from 1.25-1.75 cm in diameter have been reported previously in buffalo with larger cysts being even palpated per-rectally as movable or fluctuating masses in the cervix (Rao, 1991).

The cervix acts as a barrier between the uterine lumen and the external environment
and is more vulnerable to both infections and trauma owing to its proximity to the environment. Although the etiology of cervical cysts has not yet been elucidated, trauma during parturition, artificial insemination and obstetrical intervention may be responsible for development of the condition (Schlafer and Miller, 2007). Cervical cyst have been associated with infertility in the species (Naidu et al., 2009), and mechanical interference with the sperm transport into the uterus may be one of the plausible reasons. Further, such cysts may also prevent proper closure of the cervix during pregnancy (Rao, 1991) predisposing the uterus to ascending infections and subsequent pregnancy loss.

Endometrial cysts are often cited as a cause of infertility although a cause and effect relationship has yet to be established. However, they may be considered as an indication of the underlying pathological changes in the uterus (Paccamonti
and Pycock, 2009). Moreover, keeping in view the importance of the uterine endometrium in early embryonic development, it can be contemplated that the presence of endometrial cysts may interfere with the implantation and early embryonic development thus causing infertility. The presence of Nabothian and endometrial cysts in the present case may possibly have led to infertility resulting in the culling and slaughter of the animal.

REFERENCES


