PRODUCTIVE AND REPRODUCTIVE PERFORMANCE FOLLOWING DIAPHRAGMATIC HERNIORRHAPHY IN BUFFALOES (BUBALUS BUBALIS): A LONG TERM STUDY

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Objectives: A prospective study on pregnant and lactating buffaloes operated for diaphragmatic hernia during (2004 to 2008) was conducted to record the recurrence of diaphragmatic hernia, postoperative complications, fetal survival, calving and milk production level in the same and subsequent lactation.

Materials and methods: The study included 22 female buffaloes that survived following diaphragmatic herniorrhaphy done under general anesthesia. The animals were divided into group I (12 pregnant) and group II (10 lactating). All animals were followed postoperatively for a mean duration of 10.23 ± 1.40 months till subsequent calving and lactation.

Results: Majority of the buffaloes (66.67%, n=8) in group I calved at full term with healthy calves and produced 94% normal milk yield in the subsequent lactation. The rest of the animals had complications like abortion (n=2), ventral hernia (n=1) and death (n=1) most of which were not related to surgery. In group II, recently parturated animals (n=8) had resumed mean peak milk yield to 40% level of the normal in the same lactation. All animals of group II came in estrous and conceived. Seven buffaloes calved subsequently and produced mean peak milk yield of 90% that of normal. Three buffaloes developed complications such as recurrence of diaphragmatic hernia (n=2) and ventral incisional hernia (n=1). Majority of the surgical wound related problems (hard swelling and abscessation at postxiphoid or flank skin incision) were managed successfully.

Conclusions: After diaphragmatic herniorrhaphy majority of the surviving pregnant and lactating buffaloes were able to achieve their near normal production and reproduction performance without significant surgery-related complications.