Abstract

The current study was carried out on twenty-six buffalo females, the animals were divided into 4 groups according to the type of treatment given to each group. The first group included 11 buffaloes without any treatment female the second group included 5 buffaloes injected with a single dose of 25mg $PGF_{2\alpha}$ after previous ultrasound diagnosis of mature corpus luteum. The third group included 5 buffaloes injected with double doses of $PGF_{2\alpha}$ 11 days apart. The 4th group included 5 buffaloes treated with ovsynch protocol (GPG). The animals in all groups were subjected to Ultrasound scanning of the ovaries to determine follicular waves and corpus luteum development and blood sampling for estimation of estradiol and progesterone levels. Results indicated that the animals that showed two waves of follicular development constitute 72.7%, while those with three waves were 27.3%. The average length of the estrous cycle was 21.75±0.53 days in animals with 2-wave cycles, while those with three waves were 27.0±0.58 days, there was a high significance difference between the 2-wave and 3-wave animals in the persistence of the ovulatory follicle and the duration of the interovulatory intervals.

80% of buffaloes which were injected with single dose of $PGF_{2\alpha}$ showed estrous signs within 3-4 days of injection.

Buffaloes with double dose injection of $PGF_{2\alpha}$ showed 2-waves of follicular development.

80% of buffaloes treated with ovsynch protocol showed ovulation after first and second dose of GnRH injection, this may be due to presence of dominant follicle with diameter (1.24±0.09 cm) at 1st dose of GnRH, however, 20% ovulate only after 2nd dose of GnRH injection this may be due to presence of smaller follicle (0.97 cm) on day of 1st dose of GnRH.

Contents