

EFFICACY OF DIFFERENT ANTIBIOTICS IN THE TREATMENT OF ENDOMETRITIS IN PAKISTANI BUFFALOES

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Endometritis is one of the major reproductive disorders of the local buffalo as it causes silent heat, long calving intervals, repeat breeding, infertility and thus of great economic significance (3). An attempt was made to find out suitable antibiotics in the treatment of endometritis.

For this purpose uterine exudate was collected aseptically in artificial insemination rods from 2535 endometritic buffaloes. In vitro antibiotic sensitivity tests of each sample were performed following the method described by Ceruickshank (2). Of 2535 samples, bacterial growth was observed in 2230 (87.96%). These tests revealed that kanamycin (48.90%), was the most effective drug followed by gentamycin (45.00%), ampicillin (35.91%), chloramphenicol (32.05%), strepto-penicillin (32.00%), tetracycline (25.00%) and neomycin (22.90%). The endometritic buffaloes accordingly were treated with the most effective antibiotic through intrauterine infusions at an interval of 24 hours for 4-5 days. After the treatment, buffaloes declared clinically fit were inseminated and later checked for the pregnancy. Results showed that buffaloes gave highest response to kenamycin (88.66%) followed by strepto-penicillin (50.00%), tetracycline (47.50%), chloramphenicol (43.66%), gentamycin (40.00%) and ampicillin (33.33%). Neomycin did not cure any endometritic buffalo under observation. Conception rate of 58.33, 46.96, 43.85 and 25.00 per cent was recorded after treatment with strepto-penicillin, kanamycin, tetracycline, chloramphenicol and gentamycin, respectively.

Highest conception rate with strepto-penicillin could be due to the synergistic effects of streptomycin with penicillin because both these antibiotics disturb the permeability of the bacterial cell membrane and interfere with the cellular enzymic system of bacterial cell division (1). Results with kanamycin (46.96%) and tetracycline (43.85%) could be due to the broad-spectrum effects of these drugs. Chloramphenicol has shown a lower conception rate because this drug is not known to work against pus producing bacteria (2). The lowest conception rate (25.00%) was recorded with gentamycin and no conception with neomycin and ampicillin. It was concluded that strepto-penicillin and kanamycin should be used more frequently for the treatment of endometritis in buffaloes than other antibiotics.

REFERENCES

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