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## Abstract

### Comparison of three treatments for bovine endometritis

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Three commercial preparations for the treatment of bovine endometritis were compared: an intrauterine infusion of 1500 mg oxytetracycline hydrochloride solution, an intramuscular injection of 500  $\mu$ g cloprostenol (a synthetic analogue of prostaglandin  $F_{2\alpha}$ ), and an intramuscular injection of 3 mg oestradiol benzoate/500 kg estimated bodyweight. A total of 300 cases of endometritis were treated, of which 225 involved first, 67 involved second, and eight involved third or subsequent treatments. The overall success rate of treatment was 68 per cent. Oxytetracycline was successful in 73 per cent of cases, cloprostenol in 67 per cent and oestradiol in 63 per cent of cases. There was no significant difference between the success rates of the treatments, except for cows with mild endometritis in which oxytetracy-

cline was more successful than oestradiol (86 v 66 per cent,  $P<0.05$ ). Mild cases were treated more successfully than moderate cases (78 v 61 per cent,  $P<0.01$ ), and more successfully than severe cases (78 v 44 per cent,  $P<0.001$ ). Prostaglandin  $F_{2\alpha}$  was more successful if the milk progesterone concentration was  $>7$  ng/ml at the time of treatment ( $P<0.05$ ). The presence of a smelly discharge at the time of treatment reduced the success rate by 17 per cent ( $P<0.02$ ). The treatment to conception interval for all successful treatments of endometritis by prostaglandin  $F_{2\alpha}$  was 18.1 days shorter than for oestradiol (68.3 v 86.4 days,  $P<0.02$ ), and the interval for oxytetracycline was 16.2 days shorter than for oestradiol (70.2 v 86.4 days,  $P<0.05$ ).