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Abstract

Laparoscopy through the vaginal fornix of cows for the repeated aspiration of follicular oocytes

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A simple method is described for the repeated laparoscopic examination of the internal reproductive organs of cows and heifers through the vaginal fornix. It can be performed in a simple crush in less than 15 minutes, does not require surgery and can be used under field conditions. The method has been used for aspirating oocytes from follicles which were at least 2 mm in diameter in animals under sedation and epidural anaesthesia. In a preliminary study 11 cows and eight heifers were allocated into two groups: 12 animals were treated weekly with 500 iu pregnant mare's serum gonadotrophin and seven animals were not stimulated

with gonadotrophin. The mean numbers of oocytes collected from the treated cows $(6\cdot3)$ and heifers $(3\cdot3)$ did not differ significantly from the numbers collected from the stimulated cows $(5\cdot5)$ and heifers $(4\cdot0)$. After the procedure had been established a mean oocyte collection rate of up to 75 per cent of follicles aspirated was obtained in 12 unstimulated heifers. When follicles were aspirated twice instead of once a week, the mean number of follicles observed $(16\cdot2 \text{ vs } 7\cdot0)$ and the mean number of oocytes collected per week $(12\cdot2 \text{ vs } 5\cdot2)$ were significantly higher $(P<0\cdot05)$.

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