EFFICACY OF FERTIVET (CLOMIPHENE) ON CYSTIC OVARIIES IN CROSSBRED HOLSTEIN FRIESIAN AND HARIANA COWS

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Ovarian cyst as a cause of infertility has been accepted by Talsma and Cesar (1962). Garm (1949) reported that cows with cystic ovaries have a dysfunction of anterior pituitary causing deficiency of LH and an increased level of FSH. Various hormonal treatments have been tried. Recently GnRH has shown promising success (Cantly et al., 1975, Humke, 1978 and Singh et al., 1982). As clomiphene is widely used in women for cystic ovaries with success, it was intended to see the efficacy of this drug in animals with cystic ovaries.

MATERIALS AND METHODS

Seven cows consisting of four crossbreds (½ HF, ½ Tharparkar) and three Hariana coming to the extension unit of the college and Composite Livestock Farm, Adharta, Jabalpur from April 1981 to March 1982 were examined for repeat breeding and diagnosed as having follicular cystic ovaries. All the seven cows received intra-uterine antibiotic treatment without sensitivity test for two consecutive cycles in order to eliminate bacterial infection if any.

All the seven cows were treated with Fertivet (A product of Arex Laboratories, Pvt., Ltd., Bombay) 600 mg a day before expected estrus and 600 mg post insemination (preceeded by 125 ml of 1% copper sulphate solution). Animals were examined in case of return to estrus cycle.

RESULTS AND DISCUSSION

Gynaeco-clinical status of experimental animals before and after treatment with Fertivet is given below. All the seven animals responded to Fertivet therapy, Out of which 4 (57.14%) conceived.

<table>
<thead>
<tr>
<th>No. of Animal</th>
<th>Reproductive status before treatment</th>
<th>Average length of estrus cycles before treatment</th>
<th>Reproductive status post-treatment</th>
</tr>
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<tbody>
<tr>
<td>Seven cows</td>
<td>Both ovaries cystic, uterus flaccid, cervix hard, vagina dry.</td>
<td>16.4 days range 8–20 days</td>
<td>Pregnant-4 cows Cysts disappeared with corpus luteum 3 cows</td>
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</table>

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Fertivet is reported to act by stimulating the secretion of pituitary gonadotropin, particularly luteinizing hormone and may inhibit regulating effect of estrogen on the pituitary. The results of present study agree with the reports of Humke (1978) in cows with cystic ovaries who observed a cure-rate of 93.5% and a conception rate of 68.3% after single treatment with 0.5 to 2 mg of Lutal (LHRH). Similarly Hugel and Humke (1979) reported overall and initial conception rate with Lutal (LHRH) as 84.6% and 66.8% respectively.

In the present study disappearance of cysts and resumption of normal estrus cycles indicate that clomiphene is effective in curing this condition in cows, possibly this may be due to release of LHRH and its subsequent action. Singh et al. (1982) also reported 100% response to GnRH treatment with a conception rate of 60% in cystic cows. However, the drug should be tried in large number of animals to establish its efficacy.

SUMMARY

Seven cows with cystic ovaries were treated with 600 mg of Fertivet (Clomiphene) a day before expected estrus orally and 600 mg following insemination. All the seven cows responded by resumption of normal estrus cycles and disappearance of cysts. 57.14% of treated animals conceived following Fertivet therapy.

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REFERENCES