

EFFECT OF SLOW-RELEASE FSH ON EMBRYO RECOVERY IN DAIRY COWS

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Introduction

The objective: does a slow-release FSH superovulatory treatment (SLOW/2FSH) differ from the traditional 4-day FSH treatment (TRAD/8FSH) in the numbers of embryos and unfertilized ova (UFO).

Reduction of FSH treatments diminishes restraining, discomfort and pain to the donors and labor and human errors in administration of treatments.

Materials and Methods (see Figure 1.)

- Eight dairy cows (parity 1 to 4)
- TRAD/8FSH and SLOW/2FSH protocols
- cross-over study



Figure 2. A Holstein dairy cow.

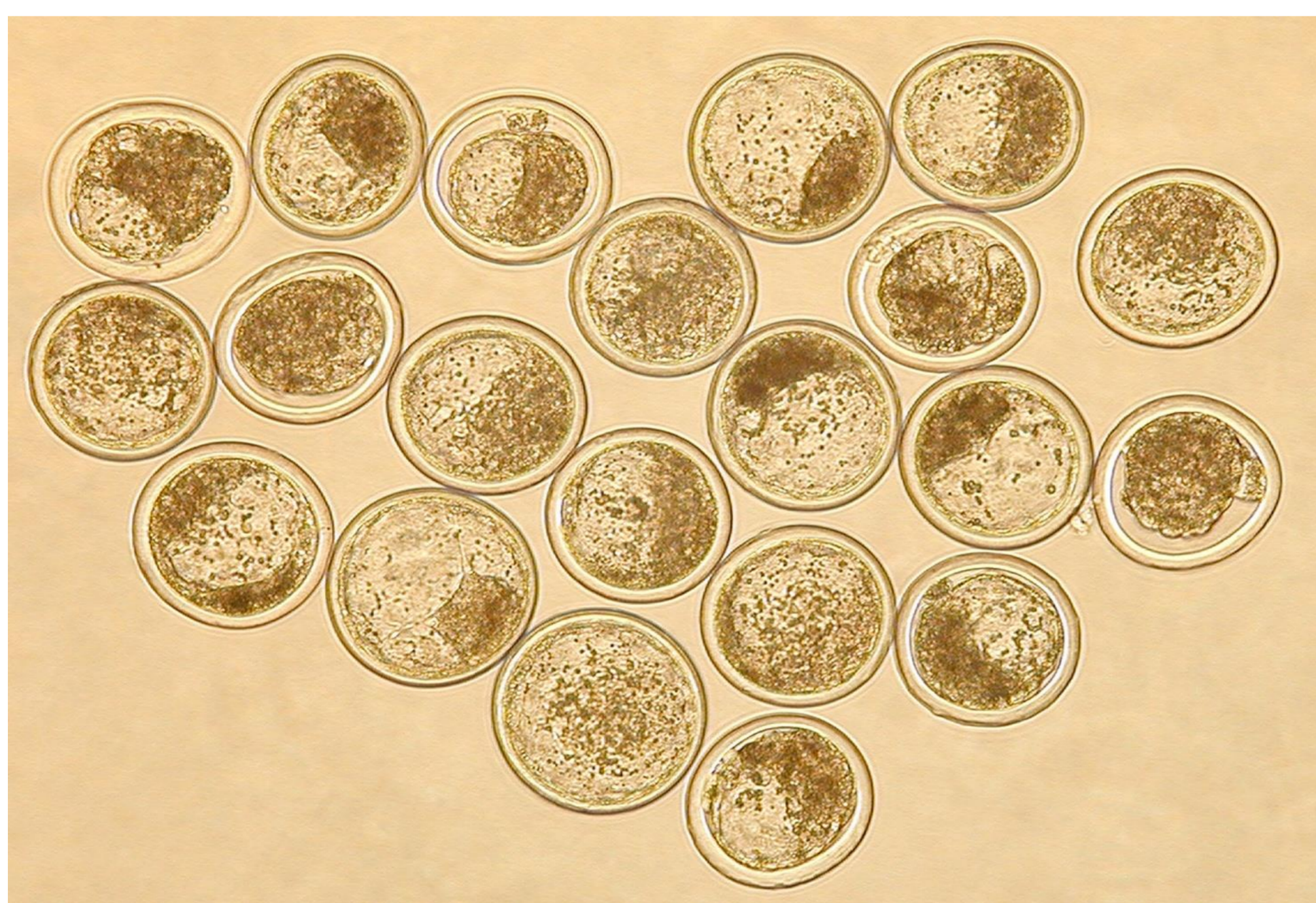


Figure 3. Grade I and II bovine early blastocysts, blastocysts and expanded blastocysts.

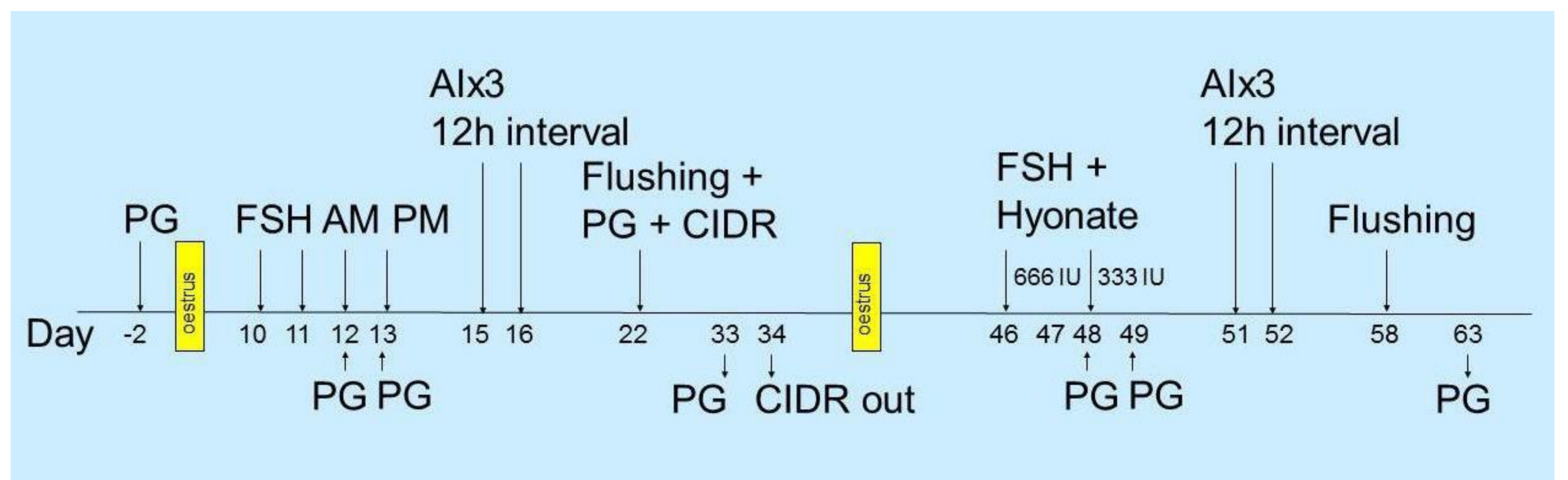


Figure 1. Superovulation protocol.

Results (see Table 1.)

- Number of viable embryos/recovery ranged from 1 to 24
- No significant differences in any categories between treatments

Table 1. No. (average \pm SD) of total structures, viable, degenerated embryos and UFO. Percentages calculated from the viable embryos and total structures in the treatment groups.

	TRAD/8FSH	SLOW/2FSH
Viable	12.5 \pm 7.1	10.3 \pm 4.9
% of grade I	72.0	79.0
% of grade II	16.0	12.3
% of grade III	12.0	8.6
Degenerated	1.0 \pm 1.9	1.0 \pm 1.1
UFO	1.8 \pm 2.3	0.6 \pm 0.9
Total	15.3 \pm 6.9	11.9 \pm 4.5
% Viable	82.0	86.2
% Degenerated	6.5	8.5
% UFO	11.5	5.3

Conclusion

No significant differences in the average numbers of viable and degenerated embryos, UFO and total structures between treatments. Therefore, as an alternative, the SLOW/2FSH treatment should be examined further.

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