

## NORMAL FERTILITY INDUCED IN COW BY DOUBLE SHORT TREATMENT WITH CHLORMADINONE ACETATE (CAP)

J. REY

*Institut Zootechniki, Zakład Biologii Hodowlanej  
32 - 083 Balice k. Krakowa (Pologne)*

After a 9-day treatment by 25 mg of CAP daily, fertility (pregnancy rate) at oestrus following the induced cycle seems to be related to the duration of that cycle. When the length of the induced cycle is not longer than 25 days, fertility rate is similar to that after a normal oestrus (62.5 vs 59.1 p. 100). On the other hand fertility is very low (7.7 p. 100,  $P < 0.01$ ) after a cycle longer than 25 days (table 1).

TABLE I

*Fertility rates at induced oestrus in relation to length of cycle after CAP treatment*

Cycle	Length of cycle (days)	Fertility rates (%)
Induced	16-36	37.8
	16-25	62.5
	26-36	7.7**
Normal (untreated controls)	18-25	59.1

\*\* :  $P < 0.01$ .

If a second 9-day treatment with 25 mg of CAP daily follows 12 days later, 93 to 97 p. 100 of treated cows exhibit oestrus within 5 to 7 days. Fertility is significantly higher ( $P < 0.05$ ) than in cows treated once with CAP for 9 days (74.2 p. 100 vs 48.4 p. 100) (table 2).

TABLE 2

*Fertility at induced oestrus either by one or two successive CAP treatments*  
 (CAP treatments : 9 days at a daily dose of 25 mg orally.  
 Oestradiol valerate (EV) : 5 mg IM at the beginning of CAP treatment)

Group	N° of cows	Treatment	Interval	Treatment	Synchronized oestrus		Fertility	
					%	N°	%	N°
1	32	CAP-EV	12 d.	CAP	96.9	31	74.2	23
2	33	—	—	CAP-EV	93.9	31	48.4	15*

\* :  $P < 0.05$ .

In a following trial, 4 groups of lactating cows received CAP in two successive treatments associated or not with an injection of 5 mg of estradiol valerate at the beginning of one or both treatments.

The fertility rates are 55.2, 60.7, 62.1 and 63.0, respectively ; they do not differ from each other, indicating that estradiol valerate has no beneficial effect.

Fertility rates of treated cows are higher than those of control cows (41.7 p. 100) during the same 25-day period (table 3).

TABLE 3

*Onset of oestrus and fertility rate at induced oestrus after 2 successive CAP treatments, with or without oestradiol valerate injection (EV)*  
 (For CAP treatments and EV injection, see table 2)

Group	N° of cows	Treatment 1	Interval	Treatment 2	Onset of oestrus after treatment 2			Fertilization	
					%	N°	scattered (in days)	%	N°
1	30	CAP-EV	12 d.	CAP-EV	96.7	29	7	55.2	16
2	29	CAP-EV	12 d.	CAP	96.6	28	6	60.7	17
3	30	CAP	12 d.	CAP-EV	96.7	29	6	62.1	18
4	29	CAP	12 d.	CAP	93.1	27	5	63.0	17
Total 1-4	118	± CAP-EV	12 d.	CAP ± EV	95.8	113	5-7	60.1	68
5	30	Untreated controls, inseminated over a 25-day period			80.0	24**	25	41.7	10

\*\* :  $P < 0.01$ .

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## RÉSUMÉ

OBTENTION D'UNE FERTILITÉ NORMALE CHEZ LA VACHE  
PAR UN DOUBLE TRAITEMENT PAR UN PROGESTOGÈNE (CAP)

Chez la Vache, deux traitements successifs 25 mg CAP/jour pendant 9 jours, séparés de 12 jours permettent d'obtenir une bonne synchronisation des œstrus et une fertilité normale à l'œstrus induit.

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