



Dairy Cattle Reproductive Council

Management and Treatment of Postpartum Uterine Problems

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Postpartum treatment

Examination and
treatment
Calving to 10 DIM



Prevent death,
further clinical
disease, direct
milk loss

Get cows pregnant
sooner than they would
have otherwise

"Pre-breeding"

28 to 60 DIM



Get cows pregnant
sooner than they would
have otherwise (or
pregnant when they
wouldn't have?)



Retained Placenta – Who cares?

- **Strong association with ↓ repro performance**
 - HR = 0.84; ↑ 11-26 days open (Fourichon, 2000)
- **BUT - impact is likely mediated through metritis and endometritis, not RP itself**
- **No direct ↑ in death or later culling** (Grohn et al 1998; 2003)
- **RP is a symptom of transition problems but is only a problem itself as a contributor to associated conditions**
- **Both the incidence and the impact of RP depend on immune function**

RP is a disease of immune function

- Cows with retained placenta had decreased neutrophil function up to 2 weeks before calving
- Interleukin-8 (IL-8) appears to mediate this

Kimura et al, 2002

- Lack of uterine contractions is not the cause
- But, hypocalcemia may contribute to reduced immune signalling and mononuclear cell function

Kimura et al, 2006

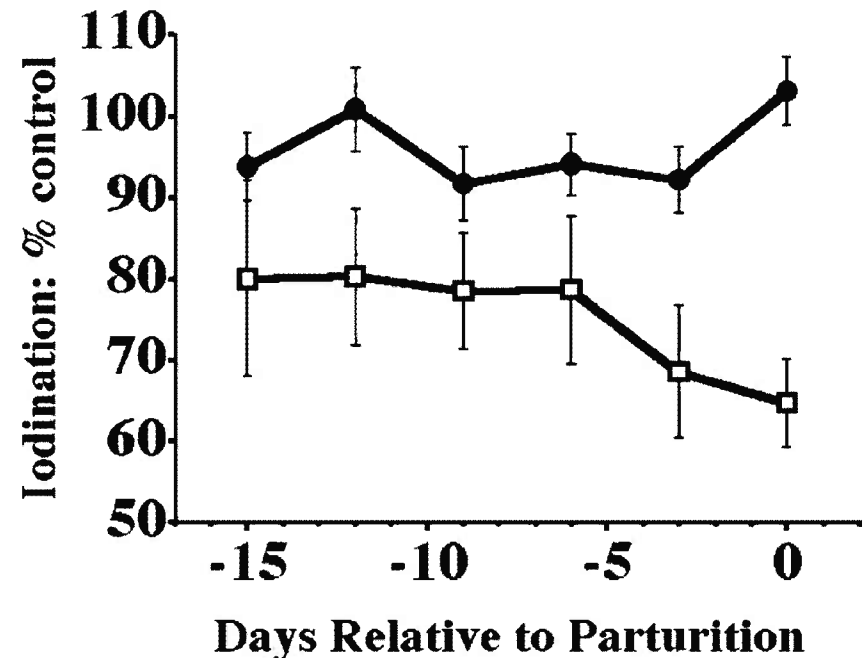


Figure 1. Myeloperoxidase activity of neutrophils in cows from both herds with retained placenta (n = 20, □) was significantly lower (disease effect, $P < 0.01$) than in cows without retained placenta (n = 122, ●) before parturition.

Risk Factors for Retained Placenta

| Variable (-6 to 0 d) | OR | 95% CI | P |
|--|------|------------|-----|
| NEFA \geq 0.5 mEq/L | 1.8 | 0.9 - 3.3 | .07 |
| α -tocopherol (per 1 μ g/ml \uparrow) | 0.79 | 0.7 - 0.96 | .02 |

Adjusted for parity, season, twins, and herd
n = 138 (71 RP, 67 non-RP)

“Prevention” of RP

- Conflicting reports on PGF or oxytocin at calving
- On balance, no compelling evidence of benefit (Stevens & Dinsmore, 1996; Frazer, 2005)
 - Many studies that reported beneficial effects were in induced calvings (e.g. Gross et al 1986)
- Uterine contractions are increased in cows with RP (Laven & Peters, 1996; Frazer, 2005)
- Calcium treatments not effective (Oetzel, 1996; Hernandez et al 1999)

Treatment of RP

- Fenprostalene or IU tetracycline (5 g daily) do not hasten shedding of RP
- IU ↓ incidence of fever ~50% to 30%
- No effect on duration of RP, ketosis, DA, mastitis, time to pregnancy.

Callahan et al , 1988; Stevens et al, 1995

- 5 g tetracycline IU results in widely variable concentration and duration of residues (mean > 2 d) Dinsmore et al, 1996

Treatment of RP

- None of oxytocin, PGF, or estrogen make RP come out sooner

Reviewed by Frazer, 2005

- No evidence of benefit of manual removal (Drillich et al 2003; 2006a) and some evidence of harm (Bolinder et al 1988)

