
**Abstract**

**Objective** To test whether the cortisol response to ring castration plus docking is reduced by additional application of a castration clamp across the full width of the scrotum distal to the ring.

**Design** A physiological study with controls.

**Procedure** Lambs, 3 to 6 weeks of age, were castrated using a ring or ring plus castration clamp applied for 6 or 10 s and docked using a ring. Blood samples were taken before and regularly for about 4 h after treatment and analysed for plasma cortisol concentrations. The healing of the scrotal wounds was monitored for 6 weeks after castration.

**Results** The plasma cortisol concentrations were lower only at 60 min after treatment in lambs castrated with a clamp placed on the scrotum for 10 s after ring castration and docking than in lambs castrated and docked by ring alone. Scrotal wounds healed more quickly after ring plus clamp than after ring only castration.

**Conclusions** The castration clamp had at most a marginal effect on the cortisol response to ring castration and docking of 3- to 6-week-old lambs, but it did seem to improve the rate of healing.