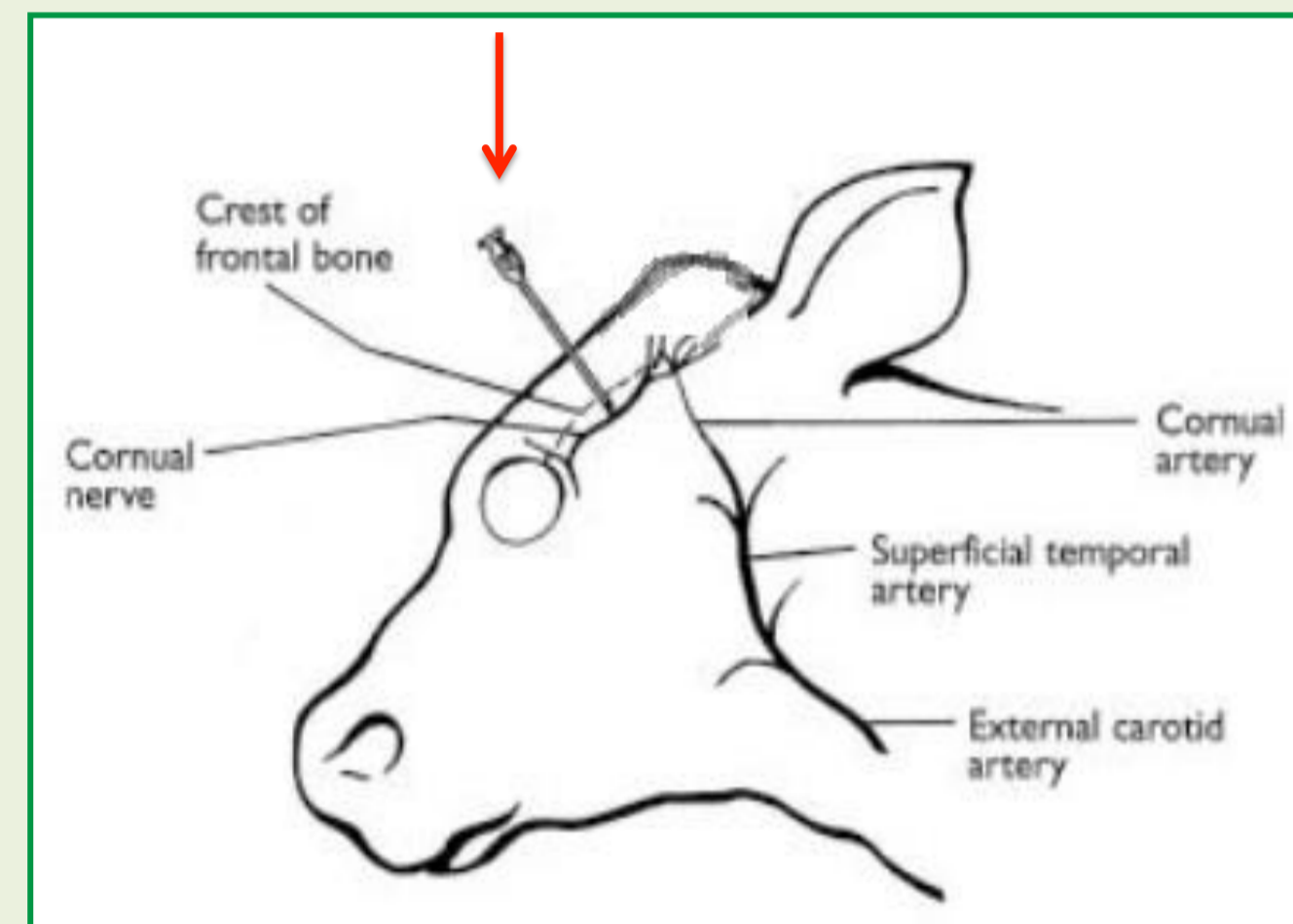


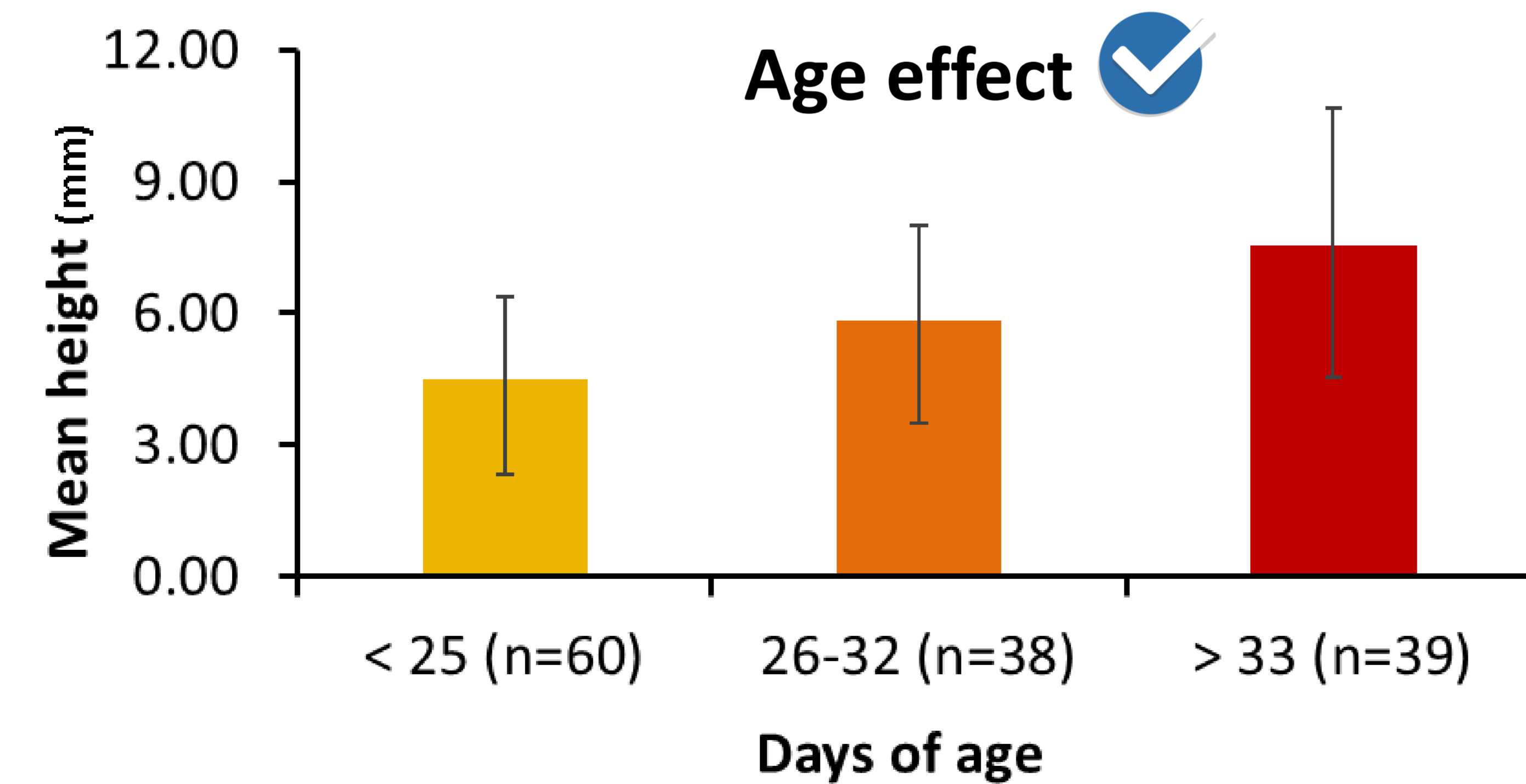
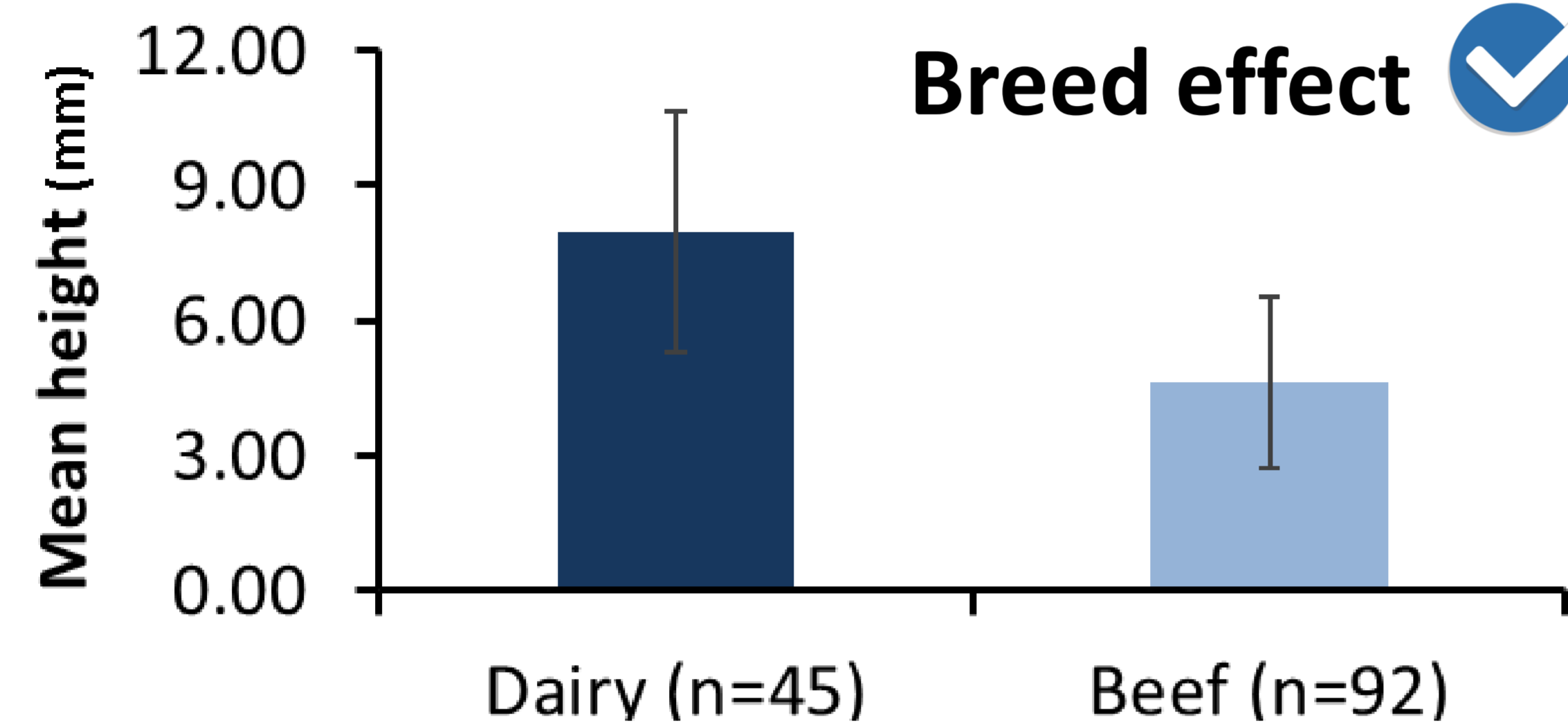
Calf disbudding and castration – welfare implications

Disbudding: performed to prevent bullying and injury to other animals, and increase handling safety.

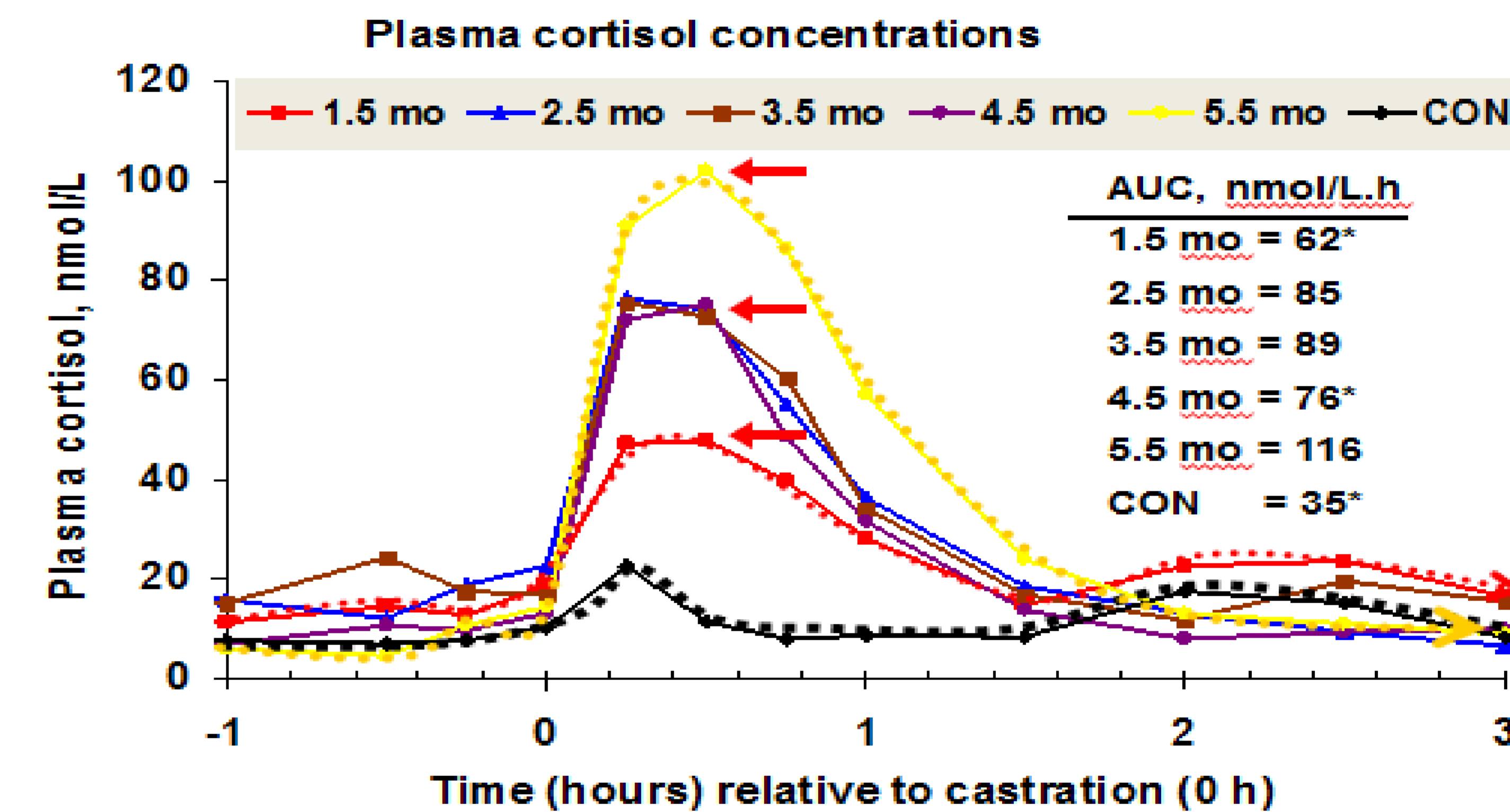
Castration: performed to prevent sexual behavior, reduce aggression, and increase handling safety.



Injection site for administration of local anaesthetic (Adrenacaine) to calves before disbudding



Local anaesthetic (LA) is required for disbudding of calves that are 15 days of age or older.



Castration increases stress hormone concentrations (plasma cortisol) in calves; the greater the calf age at castration, the greater the increase.

A calf can be castrated, other than by a vet, before 6 months of age using a Burdizzo (castration device) or before 8 days of age using a rubber ring, in both cases without the use of local anaesthesia and or analgesia (pain killers).