A pilot study on surgical trimming impact on severely overgrown claws in sheep: Behavioral, physiological, and ruminal function aspects

Ahmed Ibrahim a,*, Usama T. Mahmoudb, Nasser S. Abou Khalil c, Hussein A. Hussein d, Magda M. Ali a

Abstract:

Overgrown claws make walking painful, increase difficulty in finding food, and increase susceptibility to foot problems. This study highlights the effect of surgical claw trimming on the behavior, physiological indices, and ruminal activity of sheep. Twenty sheep that had severe claw overgrowth were divided into 2 groups: the trimmed group (T), subjected to the process of claw trimming, and the overgrown claw group, the control group (C). Claw morphometric measurements (toe length, claw height, sole length, sole width, heel height, dorsal hoof angle, fetlock angle, and dew claws length), gait analysis, behavioral patterns (feeding, rumination, drinking, standing, walking, and resting), hematological and blood biochemical indices (complete blood count, plasma cortisol, glucose, lactate, copper, and tumor necrosis factorea levels), and ruminal function tests (ruminal PH, and count and activity of ruminal fauna) were evaluated in both groups. The overgrown claw trimming improved sheep behavior, gait scoring, physiological indicators, and ruminal activity.

Keywords: sheep surgical trimming claws behavior physiological parameter ruminal activity

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