Insect Bite Hypersensitivity: Owner Versus Veterinarian Disease Severity Scoring

Insect Bite Hypersensitivity (IBH) is the most prevalent cause of equine seasonal pruritis where *Culicoides spp.* midges are present.[1] There is no standardised scoring system or definitive treatment available for the condition.[2]

Veterinarians trained in the use of a 0-7 scoring system were asked to score the severity of disease in each horse they submitted to the study (total 106 enrolled horses) and whether they believed treatment was required. Owners were asked to assess their own horses and rate itch and disease severity, describe treatments undertaken, and whether they believed their horse required additional treatment. Intra-class correlation coefficients (ICCs) were calculated to assess inter-observer agreement.

There was 52% agreement between owner and veterinarian disease severity rating and 32% agreement between owner itch severity and veterinarian disease severity rating. Owner itch ratings had 67% agreement with owner disease severity ratings. Owner and veterinarian severity ratings were better correlated in more severely affected animals. The proportion of owners who deemed their horse required treatment increased with disease severity scores. Veterinarians recommended treatment for all untreated horses with veterinarian disease severity ratings greater than four. The use of rugging, topical treatments and insect repellents were common between treated horses of all severity ratings, with antihistamine or immunomodulatory therapy utilised in only 5.5% of treated horses.

Owners are likely to score IBH disease severity higher than veterinarians and veterinarians and owners are more likely to recommend treatment for severely affected horses. Rugging, topical treatments and insect repellents were more widely used than systemic therapies.

References

1. Pilsworth RC, Knottenbelt DC. Equine insect hypersensitivity. Equine Vet Educ 2004;16(6):324-325

2. Cox A, Stewart AJ. Insect bite hypersensitivity in horses: causes, diagnosis, scoring and new therapies. Animals (Basel) 2023;13(15):2514

Institutional affiliations: The University of Queensland, School of Veterinary Science, Gatton campus, Gatton, QLD

Animal ethics approvals were acquired for this study (UQ AEC: SVS/454/19)