

Reports of Injuries in Dog Sports

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Dog owners can participate in a wide variety of dog sports. Agility, Hunting, Track Racing, Lure Racing, Obedience, Rally-O, Flyball, Scent Hurdle, Earth Dog, Weight pulling, Field Trialing, Sled Dog Racing, Skijoring, Freestyle, Carting, Tracking, Frisbee Dog, and Herding are some common dog sports. Of these, little is written or reported regarding musculoskeletal injuries associated with these sports, and only 5 papers could be retrieved that endeavoured to study these types of injuries.

Agility trialling made its debut as entertainment for spectators at the Crufts Dog Show in England in 1978-79.(Holmes 2005; Levy et al 2009) Since this time, it has become the most rapidly growing dog sport. (Gauntt 1996) Two surveys could be found pertaining to agility, one British and one American. (Holmes 2005, Levy et al 2009) The Holmes study reported that 19% of respondents suffered agility-related injuries, whereas the Levy study reported a 33% injury rate amongst respondents. Commonalities in the surveys revealed that border collies, followed by working sheepdogs (Australian shepherd and shelties) were the breeds most commonly participating in the sports, and Levy et al (2009) found that these dogs were the most commonly injured as well. Both studies reported injuries occurring primarily during competition or practice. Injuries occurred due to direct contact with objects (A-frame, teeter, dogwalk, or bar jumps), turning or twisting during jumps, slips and falls, or chronic overuse. Both studies found that injuries were predominantly soft tissue injuries (including sprains / strains), and the Holmes study reported additionally that non-specific lameness was commonly reports. Personal communication with Holmes elucidated further that 48% of the injuries were undiagnosed lamenesses. The Levy study additionally found that 78% of injured dogs had their diagnosis confirmed by a veterinarian, and that injuries to the shoulder and back were most common, with a lesser amount of injuries occurring to the hips, stifles, carpi, thighs, and phalanges. Forty six percent of injuries lasted less than 6 weeks, and 42% required greater than 6 weeks to resolve according to Levy et al. Whereas Holmes found that 54% of injured dogs resumed normal activity within 4 weeks and 46% returned to sport within 10 weeks. Both studies found that many dogs retired from the sport directly due to an injury acquired during performance of the sport. Additionally, Holmes reported that 26% of the injured dogs were referred to physiotherapy, of which, 78% reported to be significantly improved and the remaining were cured.

Gundog lameness and injuries over a two year period in Great Britain were studied via survey by Houlton (2008). The incidence of injuries / lameness was found to average at 25% of dogs per season, of which, only 47% were treated by a veterinarian. The author commented that veterinarians may not necessarily be the best informed about the nature of such injuries associated with hunting activities since many dogs are treated by knowledgeable and experienced owners / trainers. From the data collected, the primary kinds of injuries were firstly grouped together as wound, (excluding foot injuries), as well as tail injuries. The second most common injuries were those to the pads, nails and webbing of the feet. Thirdly, ocular injuries and miscellaneous conditions were reported, and lastly, articular pathology, fractures and muscular injuries were identified. Four and a half percent of the injured dogs were diagnosed with a shoulder-related lameness, of which 80% were thought to be strains.

Additionally, there was a highly significant association between tail injuries and undocked Springer and Cocker Spaniels.

Two studies have endeavoured to survey racing injuries in greyhounds.(Prole 1976; Sicard et al 1999) The 1976 study reported that shoulder injuries made up 18.5% of the total injuries, with the primary lesion being a strained triceps muscle (affecting the right limb more so than the left). Injuries to the carpus comprised 11% of the total, with the primary lesion being sprains (affecting the right limb more so than the left). Ten percent of the total injuries were strains of the flexor tendons at the metacarpus region (this time affecting the left limb more than the right). Sprains of the forelimb toes accounted for 33% of all injuries (again affecting the left more than the right). Within the hind leg, muscle injuries accounted for only 8% of total injuries, with the primary lesion occurring to the gracilis muscle (right greater than left). Six percent of injuries were to the tarsus, with nearly all of these being fractures to the right side. The pes suffered 9% of all injuries, primarily affecting a toe and showing fairly even distribution between the right and left sides. The Sicard et al study in 1999 reported an average of 4.4% injury rate per race. That study noted that 20% of injuries occurred during the first turn of the race, that 8.3% occurred during the second turn, and that while injuries were reported to have occurred at the third and fourth turns, 45.5% occurred at unknown locations on the track. Of the injuries reported, muscle was injured most, followed by hock injuries, toe injuries, carpal injuries, and metacarpal / metatarsal injuries.

These surveys when interpreted together reveal some commonalities, and bring forth a number of questions. All studies could beg the question, 'how can injuries be prevented'? Can slips and falls or collisions with obstacles in agility be avoided? While wounds, foot trauma and ocular injuries could simply be hazards of working in bush or unmanicured fields, can muscular injuries be prevented in gundogs? Is there any correlation between the high incidence of muscle injuries and the high incidence of injuries occurring at the first turn of a greyhound race? Can this too be prevented? As well, since many of the dogs in all groups suffered muscular injuries of the shoulder region, can veterinarians be better informed regarding assessment and treatment of muscle injuries in this area? Lastly, what is the best way to return an injured animal to sport? These are questions that need to be addressed by future studies, and rehabilitation therapy could have a role to play in answering them!

References

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