All the dogs used in the study were either greyhounds or sighthounds. These breeds have much thinner skin than most other breeds and also seem to have much thinner pads, hence the probable cause of the higher incidence in these breeds, i.e. thinner pads are more prone to bruising and haemorrhage into the deeper pad tissues with subsequent thickening of pad tissue.

Also, penetrating wounds from sharp objects, eg. glass, are more likely to penetrate right through the pad into the sensitive tissue beneath. Direct trauma produces a more superficial thickening of the pad tissue, whereas penetrating wounds cause a conical shaped lesion, with the point of the cone directed inwards, where it may even be in contact with the insertion of the deep digital flexor tendon onto the bottom bone of the toe.

As a rule, corns are more common in males, and occur mainly (more than 90%) in the two central toes of the front legs.

Clinical signs include thickening of the digital pad, firm tissue palpable in the pad, pain on pressure across the pad as well as directly over the corn, lameness, and sometimes a penetrating wound is visible.

Diagnosis relies on history, clinical signs and radiography. Radiography is important as it will demonstrate foreign bodies if they are present, including glass. Lateral, antero-posterior and oblique angles should be taken, using reduced exposure levels to more clearly outline corn tissue and small pieces of glass or other foreign material.

Treatment of corns depends on whether they are superficial or deep. Superficial corns can be chemically cauterized and the dead tissue shaved back every 3-4 days using compounds such as silver nitrate, ferric chloride or salicylic acid ointment. This process is repeated until the pad is normal and may take several weeks. It needs to be done under sedation or digital nerve block and the foot must be bandaged for the entire time.

They can also be surgically treated under general anaesthesia, with the deep flexor tendon, to ensure all corn tissue is removed. The pad is then sutured using fine monofilament suture material. The foot is then kept bandaged for 2-3 weeks until full healing has occurred. It is vital that the bandaged foot be kept dry, otherwise healing will be delayed and infection is a real risk.

Although surgery gives a good initial response, the recurrence rate is over 50% because surgery does not prevent further trauma in the future. Amputation of P3, the bottom bone in the toe, with preservation of the pad, has given good results in selected cases.

Obviously prevention would be better than attempted cure, and although there is no guaranteed method of prevention, one of the suggestions made by Dr Jim Gannon, a noted greyhound specialist veterinarian, was to soak the pads in Neatsfoot Oil for 1-2 minutes daily. This causes the pads to become thicker and more rubbery and pliable, rather than becoming hard and cracked. The thicker and more pliable the pads are, the less likely they are to suffer from the deep bruising and trauma that sets corns off.

Malcolm Jansen
GAP Trustee & Veterinarian

For many years it was assumed that corns in greyhounds were the result of papilloma virus infection causing an ‘ingrown wart’ in the pad. However, a recent research paper published in the USA concluded that there was little or no evidence for this assumption. The authors of the paper used modern technology to look for viral DNA in corn samples from affected dogs and failed to find any evidence of viral presence. They concluded that trauma, ie. low grade bruising and injury, was the primary cause.

If you think your hound may be suffering from corns, take them to your vet for a thorough examination immediately.