‘Alabama Rot’– the veterinary view from the British Small Animal Veterinary Association & Small Animal Medicine Society

As a result of a series of media reports, some UK veterinary practices have received queries from concerned clients about ‘Alabama Rot’. However David Walker of Anderson Moores Veterinary Specialists, who collated and investigated the original cases, has always been keen to stress that so far this problem has been confined to a limited number of animals and that any conclusive diagnosis would only come as a result of further investigations.

The media interest was generated after two cases of dogs with acute kidney injury and skin lesions were recognised in the New Forest in late 2013. Whilst the majority of the reported cases were documented between December 2012 and March 2013 in the New Forest, cases were also reported in Cornwall, Dorset, Surrey, Worcestershire and County Durham. As David points out, “the key messages are that this problem has affected a very small number of dogs and that most skin lesions you see in general practice will not be related to this disease, along with the fact that most cases of kidney injury in dogs are not caused by this disorder. There has been some media interest in these dogs and despite trying to get these messages across they have sometimes been left out or modified in the editing process.”

The skin lesions have typically been one to four centimetres in length and were sometimes pre-dated by a focal swelling. They have generally, but not exclusively, been below the stifle or elbow and have typically had the appearance of an erosion or ulcer. The affected dogs went on to develop clinical signs of acute kidney injury over the subsequent two to seven days. Histopathology of the kidneys revealed changes almost identical to those reported in idiopathic cutaneous and renal glomerular vasculopathy. This disease, sometimes referred to as ‘Alabama Rot’, has been reported predominantly in greyhounds and is of unclear aetiology. However, unlike in the UK cases, only a quarter of those previously reported dogs went on to develop kidney injury

A scientific paper including all of the case information, clinical pathology findings, light microscopy findings, electron microscopy findings and the results of further investigations, including an epidemiological study of the UK dogs is soon to be submitted for publication. This will allow comparison with the published cases of idiopathic cutaneous and renal glomerular vasculopathy.

Veterinary Surgeons will no doubt be faced with clients concerned that their dog might have this condition. Some veterinary surgeons in practices in the New Forest have recently been offering their clients serum biochemistry or urea and creatinine concentration measurement at initial presentation of a dog with a skin lesion of unknown cause. "This may be within the normal reference range at initial presentation; however, it will provide a baseline and can be followed up with serial testing over the next two to four days", David says. "Whether or not to do this is solely at your discretion; however, it is something that could be discussed with the concerned client. The lesions have been managed with antibiotic therapy if appropriate and analgesia as necessary. It may be sensible to avoid the use of non-steroidal anti-inflammatory drugs in patients with a skin lesion of unknown origin."

Vets who would like advice if presented with a dog with a skin lesion of unknown cause, that subsequently goes on to develop azotaemia should seek specialist advice immediately as a fifth of the UK cases have survived with aggressive management. Suspected cases should be reported to David Walker at Anderson Moores Veterinary Specialists (01962 767920; medicine@andersonmoores.com) which will aid the understanding of the epidemiology of this condition and potentially allow further diagnostics to be performed.

Ends

Additional information

More about Alabama Rot
(Note there is insufficient information to conclude that the UK dogs in the cases referred to were suffering from this disease, only that it bears some similarities).

The first report in the literature described it as; "*an idiopathic disease involving skin and occasionally kidneys was seen in kennelled and racing greyhounds. Haemorrhages, fibrinoid arteritis, thrombosis, and infarction with deep, slowly healing ulcers characterized the skin lesions. Peracute renal glomerular necrosis, particularly involving afferent arterioles with intravascular coagulation in glomerular capillaries were the distinctive findings in affected kidneys. A complex pathogenesis of this disorder was suspected in which genetic predisposition plays a prominent role*" (Carpenter, Andelman et al. 1988).

It has also been suggested that skin lesions followed by acute renal failure could be as the result of an adder bite, although these cases would usually have other signs as well (Sutton, Bates et al. 2011).

Researchers at Kansas State University were given funds from the American Greyhound Council and Kansas Racing Commission to study the disease and their findings were published describing the condition as idiopathic cutaneous and renal glomerular vasculopathy (Hertzke, Cowan et al. 1995) and (Cowan, Hertzke et al. 1997). The condition has also been reported in a Great Dane (Rotermund, Peters et al. 2002).

Analogies have been drawn with haemolytic uraemic syndrome which is a severe, life-threatening complication that occurs in about 10% of those infected with *Escherichia coli* O157:H7 or other Shiga toxin producing organisms. This condition has also been described in the dog, although in these cases haemorrhagic gastroenteritis preceded the onset of acute renal failure (Holloway, Senior et al. 1993 and Chantrey, Chapman et al. 2002).

References

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