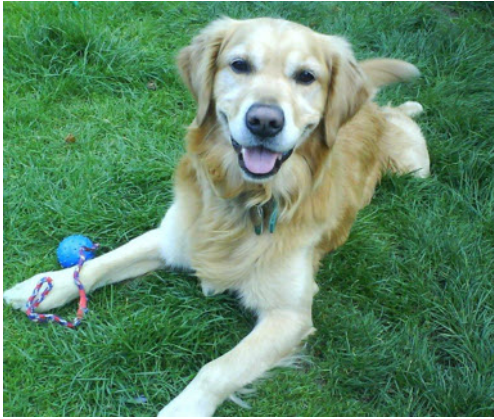




Interesting Case from our web site www.fairfield-vets.co.uk



"Toby" - Golden Retriever with Advanced Malignant Melanoma



Toby

Advanced malignant melanoma is a highly aggressive cancer in dogs (and a form of skin cancer in humans) which is usually fatal despite surgery and chemotherapy. So when "Toby", a 7 year old Golden Retriever, belonging to one of my nursing staff (Sarah), was diagnosed with this condition the outlook was very gloomy.

In his favour, the lesion in his mouth had been detected and removed surgically at an early stage. Nevertheless, the probability of spread of the disease remained high and "Toby's" projected survival time remained at only 6-12 months.

Fortunately, a novel approach to cancer treatment has been gaining momentum over the last decade. Instead of trying to kill the cancer directly with drugs the current thinking is to assist the patient's own immune system in targeting and killing the cancer cells.

This "concept" of harnessing the power of the immune system is not new. For over 200 years, vaccinating against foreign micro-organisms has saved untold numbers of people and animals (eg. flu, smallpox, measles, distemper). This technique relies on the immune system's principal function of attacking and destroying anything that is identified as "foreign".

The key issue in producing a vaccine for cancer is that you are asking the immune system to attack the patient's own cells which under normal circumstances is clearly not a good thing! The way around this problem is to vaccinate with material from another species.

The similarities in the DNA between mammals means that the genetic material from humans, which is specific for melanoma cancer, can stimulate an immune response in "Toby". Just as, genetic material from other mammals can stimulate an immune response in humans. A previous study in dogs, using human DNA within a vaccine, produced remarkable results. Consequently, it is hoped that Toby will be around for many years to come!

As our genetic profiles are steadily being revealed the potential benefits for both human and veterinary patients in the treatment of cancer shows exciting prospects. It could just be that your faithful friend may be able to offer a little more than companionship!

Terry Dunne BVMS, Cert SAO, MRCVS

This article is available on the Fairfield Veterinary Centre web site at www.fairfield-vets.co.uk

You won't care how much we know - until you know how much we care