

Veterinary regenerative medicine – clinical patients as potential models for naturally occurring disease

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Abstract

When it comes to translating research from bench to bedside many of the pioneering innovations are achieved by cooperating teams of natural scientists, human medical and veterinary medical scientists. The symbiosis is particularly apparent in the rapidly growing field of regenerative medicine. The veterinary profession has an important role to play in the translational process offering the missing link between basic science and human clinical applications. Many naturally occurring diseases encountered in humans also pose a problem in veterinary patients. These diseases certainly raise the interest in regenerative medical treatments on the veterinary side but at the same time offer the perfect model for human patients, better than artificially created diseases in lab animals which do not properly reflect the clinical situation in humans. Tight cooperation between basic sciences, human medicine and veterinary medicine would therefore not only be beneficial for veterinary patients but would drive the field of regenerative medicine forward for the benefit of both human and veterinary patients. The purpose of this presentation is to give an overview on the current clinical state of the art in veterinary regenerative medicine and potential animal models for diseases with similar pathology and aetiopathogenesis as in humans.