

Abstract

The present study aimed to develop a method for testing pain-related behaviour induced by formalin in the Speke's hingeback tortoise (*Kinixys spekii*). These animals retract their head and limbs into their shell when approached, making behavioural testing almost impossible. It was found that suspending the animals in the air, facing away from the observer, made the animals keep their limbs out of the shell. Subcutaneous injection of formalin induced easily identifiable and quantifiable behaviours that lasted for 20 minutes. Contrary to the biphasic effect of formalin observed in rats and mice, the response in tortoises was monophasic. The suspended formalin test may be useful for studying nociceptive mechanisms in tortoises, which in turn will be important for a further understanding of the nociceptive system in reptiles as well as in mammals.