Abstract

Lateralization of brain structures manifesting behavioral laterality is a known phenomenon among vertebrates, and their equivalents are also found in invertebrates. In this paper, I will review motor laterality in mammals, which includes mainly preferential use of one limb/paw (Handedness) and spatial preferences in rotational behavior. In this work, I will summarize laterality of rotational behavior, as the most important part of my paper, within the larger scope of motor laterality. I will offer some explanations of laterality changes depending on the surrounding circumstances, and the emotional setting of individuals and present examples of laterality at the individual and population levels in mammals.

Keywords: Lateralization, Motor laterality, rotational/turning asymmetries, Handedness, Forelimb preference, Individual laterality, Population laterality, Mammals