INTRODUCTION

The common palm civet cat (*Paradoxurus hermaphroditus*) is schedule-II animal as per the wildlife protection Act, 1972. The family of the Common palm civet cat is Viverridae. They are nocturnal animal, arboreal and solitary. Their population is decreasing due to habitat loss. They are mainly fond of fruit and honey, and found in most of the non-Himalayan India except the arid west (Menon, 2003). The dog is the first domesticated species in the world and has been selectively bred over millennia for various behaviors, sensory capabilities, and physical attributes (Dewey and Bhagat, 2002). The family of dog is Canidae. Since there is very scanty literature on the comparative anatomy of scapula of Common palm civet cat (*Paradoxurus hermaphroditus*) and Dog (*Canis lupus familiaris*), being a schedule-II animal of wildlife and first domesticated animal of animal diversity. Hence, the present study was designed to establish gross anatomical norms on the scapula of these animals.

MATERIALS AND METHODS

In the current investigation, the scapulas of thoracic limbs were collected from an adult Common palm civet cat (*Paradoxurus hermaphroditus*) and Dog (*Canis lupus familiaris*) after death of the animal. The animal was died in road accident in the campus of College of Veterinary Science, Assam Agricultural University, Khanapara, Guwahati, Assam, India. After death of the animal was brought to the Department and the scapulas were processed as per the standard method of Young (1980) and gross anatomical studies were made on it.

RESULT AND DISCUSSIONS

The present study was conducted on one pair of scapula of Common palm civet cat (*Paradoxurus hermaphroditus*) and Dog (*Canis lupus familiaris*). The scapula of Common palm civet cat had two surfaces, three borders and three angles. These findings were in accordance with the findings of Sisson (1975) in carnivore. The sub scapular fossae of the scapula of Dog (*Canis lupus familiaris*) was more deep compared to the scapula of Common palm civet cat (*Paradoxurus hermaphroditus*). The scapular index of Common palm civet cat was less compared to the scapula of dog.
where as caudal angle of the scapula was formed by the vertebral border and caudal border. The glenoid angle of the scapula were composed of supra glenoid tubercle, acromion process, glenoid notch, glenoid cavity and rim of the glenoid cavity (Figure 5). The depths of glenoid cavity and glenoid notch were more compared to the scapula of the dog. The necks of the scapula of Dog (*Canis lupus familiaris*) were less constricted compared to the scapula of Common palm civet cat (*Paradoxurus hermaphroditus*) (Figure 6).

**Figure 1:** Photograph showing the lateral surface (A) dorsal border (1) caudal border (2) cranial border (4) rough area for the attachment of muscle (3) of scapula of Common palm civet cat (*Paradoxurus hermaphroditus*).

**Figure 2:** Photograph showing the vertebral border (1), cranial border (2), rough area of spine (3), caudal border (4) and acromion process (5) of scapula of dog (*Canis lupus familiaris*).

**Figure 3:** Photograph showing the tubercle (1), glenoid cavity (2), neck (3) of scapula of Common palm civet cat (*Paradoxurus hermaphroditus*) (A) and sub scapular fossa (4), neck (5), tubercle (6) and glenoid cavity (7) of scapula of Dog (*Canis lupus familiaris*).

**Figure 4:** Photograph showing the medial surface (B) rough line (2) sub scapular fossa (1) and neck (3) of the scapula of common palm civet cat (*Paradoxurus hermaphroditus*).

**Figure 5:** Photograph showing the supra glenoid tubercle (1), acromion process (2), glenoid notch (3), glenoid cavity (3) and rim of the glenoid cavity (5) of scapula of Common palm civet cat (*Paradoxurus hermaphroditus*).

**Figure 6:** Photograph showing the scapula of Common palm civet cat (*Paradoxurus hermaphroditus*) (A) and Vertebral border (1), cranial border (2), rough area of spine (3), caudal border (4) and acromion process (5) of scapula of Dog (*Canis lupus familiaris*).
SUMMARY AND CONCLUSION

In current study, the size of the supraspinous and infraspinous fosse were larger compared to the fosse of scapula of Dog. The size of the rough area of the scapular spine of Common palm civet cat was larger compared to the size of the rough area of the scapular spine of dog. The sub scapular fosse of the scapula of Dog (*Canis lupus familiaris*) was more deep compared to the scapula of Common palm civet cat. The scapular index of Common palm civet cat was less compared to the scapula of dog. The depths of glenoid cavity and glenoid notch of scapula of Common palm civet cat were more compared to the scapula of the dog. The neck of the scapula of Dog (*Canis lupus familiaris*) was less constricted compared to the scapula of Common palm civet cat (*Paradoxurus hermaphroditus*). The studies will be helpful to wildlife veterinarian to effective control the disease regime as well as veterolegal cases.

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