

Gross Morphometrical studies of Sternum of Pariah Kite (*Milvus migrans*)

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Abstract

The sternum of an adult Pariah kite (*Milvus migrans*) was studied for its gross morphometry. It was procured from Department of Wildlife Health and Management. The sternum of Pariah Kite was in the form of quadrilateral plate with dorsal, concave surface and ventral, convex surface. It formed the thoracic floor and was directed backwards and downwards in an oblique manner. The length and width of sternum were 6.00 cm and 4.20 cm., respectively. Ventral projection, the carina was in the form of thin curved plate, the height of which decreased from before backwards. It was 6.00 cm long, 1.30cm wide and 0.30cm thick (at anterior end). Anterior border was triangular and had an elongated facet on either side for articulation with distal extremity of the coracoids. The caudolateral angles were prominent. At the medial aspect of caudolateral angles a small oval, translucent area covered with a thin membrane was present.

Key words: Morphometry, Sternum, Carina, Pariah kite, *Milvus migrans*, Wildlife, Anatomy.

Introduction

Detailed information is available on various bones of domestic fowl (Bradley and Grahame, 1960; Getty, 1975 and King and McLelland, 1975). Some literature are available on wild birds viz. Ostrich (Sathyamoorthy et al., 2001), Emu (Sankhpal et al., 2006) and Vulture (Bodkhe et al., 2006). However very meager information is available on morphometrical studies on Pariah kite.

Keeping the above facts in view the present study was undertaken to identify the species on the basis of bones of Pariah kite.

Material and Methods

The carcass was procured from Department of Wildlife Health and Management, Veterinary College Jabalpur (M.P.) India.

After procurement of carcass the skeleton was taken out by maceration method. The morphological and morphometrical studies were conducted on sternum.

Results and Discussion

The sternum of Pariah kite was in the form of quadrilateral plate with dorsal, concave surface and ventral, convex surface. It formed the thoracic floor and was directed backwards and downwards in an oblique manner (fig.1 and 2). These findings were in

accordance with the observations of Bodkhe et al.,(2006) in sternum of vulture. The length and width of sternum were 6.00 cm and 4.20 cm., respectively.

Ventral projection, the carina was in the form of thin curved plate, the height of which decreased from before backwards (fig. 1 and 3). It was 6.00 cm long, 1.30cm wide and 0.30cm thick (at anterior end). The cranial end of carina was rounded, where as it is pointed in domestic fowl as reported by Bradley and Grahame (1960); Getty (1975) and King and McLelland (1975).

Anterior border was triangular and had an elongated facet on either side for articulation with distal extremity of the coracoids. The caudolateral angles were prominent. At the medial aspect of caudolateral angles a small oval, translucent area covered with a thin membrane was observed (fig. 1 and 4).

The rostrum was absent in Pariah kite, where as Bodkhe et al. (2006) observed a short rostrum in vulture but Bradley and Grahame (1960); Getty (1975) and King and McLelland (1975) observed prominent rostrum in domestic fowl.

The anterior and posterior processes were not seen in Pariah kite, how ever Bradley and Grahame (1960); Getty (1975) and King and McLelland (1975) have reported two anterior and two posterior sternal processes in domestic fowl.

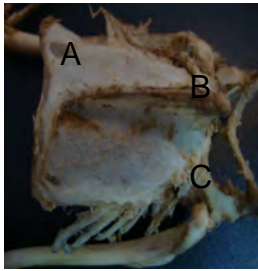


Figure-1. Ventral view of sternum (Articulated with Coracoid).

A. Oval translucent area
B. Carina, C. Coracoid



Figure-2. Dorsal view of sternum (Articulation with girdle)

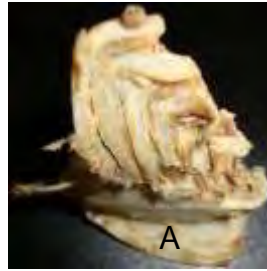


Figure-3: Lateral view along with ribs showing Carina

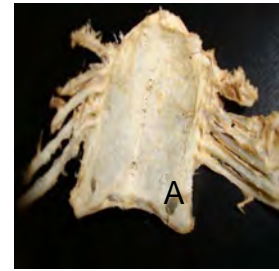


Figure-4: Dorsal view of sternum (articulation with ribs)

Conclusion

Present study showed the sternum of Pariah kite can be identified and differentiated easily by the non pointed carina, absence of rostrum, absence of sternal processes and presence of oval translucent areas.

Acknowledgement

I would like to thank Dr. R.P.S.Baghel, Dean, College of Veterinary Science and Animal Husbandry, Jabalpur, India for providing me all the facilities and financial supports to conduct my research.

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