PATHOLOGICAL AND IMMUNOHISTOCHEMICAL CHARACTERISTICS OF BILATERAL SMOOTH MUSCLE HAMARTOMAS IN BROAD LIGAMENT OF A SLAUGHTERED RIVER BUFFALO (*BUBALUS BUBALIS*) *SHORT COMMUNICATION*

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Abstract. This report is related to bilateral and symmetrical smooth muscle hamartomas (SMH) in broad ligament of a 5-year-old slaughtered river buffalo. The reddish pink masses with triangle-shaped and fleshy consistence had occupied mesovarium of broad ligament. Microscopic findings in histopathologic sections revealed smooth muscle bundles elongated randomly which appeared haphazardly and there was fibroadipiose tissue between them in variable amounts. The nuclei of smooth muscle cells were cigar shaped, vesicular and had rounded blunt endings. Neither mitotic figure nor pleomorphism was seen in the nuclei of smooth muscle cells. Also, prominent vascular proliferation was present in some areas of stroma. No degenerative changes, necrosis neither inflammation was noted. Immunohistochemical examinations showed strong positive reaction for smooth muscle actin, desmin and faint positive reaction for S100. Meanwhile the special staining for estrogen, progesterone, vimentin, cytoceratin, von Willebrand factor and CD34 were negative. According to the macroscopic, microscopic and immunohistochemistry findings, the diagnosis of SMH was made. As best of our knowledge, there are no reports on SMH in broad ligament of animals. The present report for SMH of broad ligament in river buffalo seems to be the first one.

Keywords: broad ligament, river buffalo, smooth muscle hamartoma, pathology, immunohistochemistry.