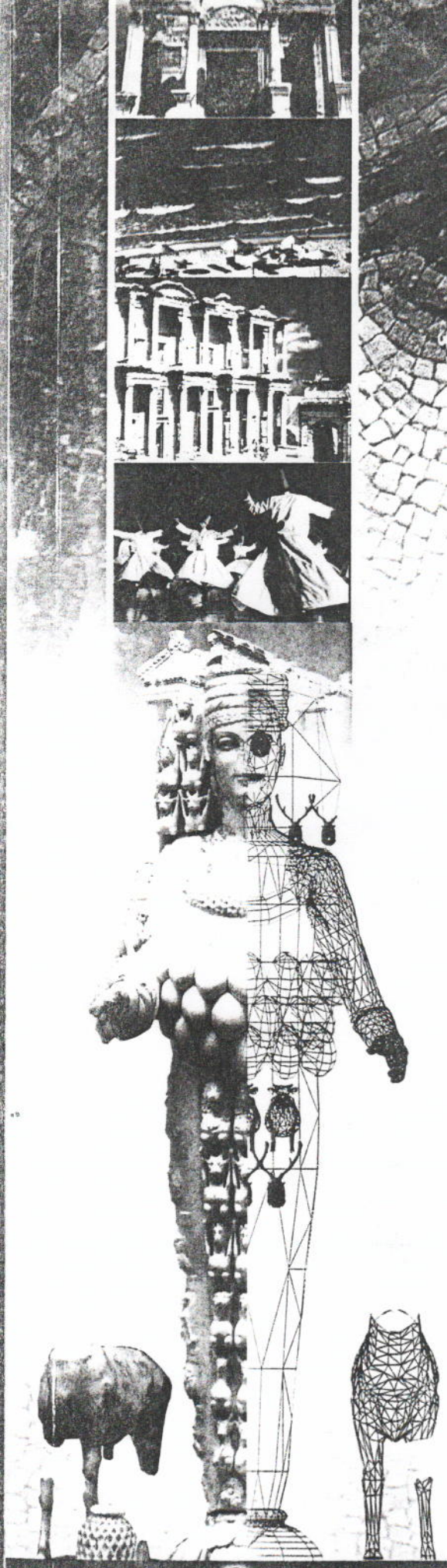

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Abstract Book

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Histological study on the sinu- atrial node in the heart of ovine fetuses

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The sinu- atrial node (SAN) enables the heart to pulsate continuously by producing impulses. As the histological information about the SAN of ovine fetuses is basically needed in various fields of veterinary sciences, such as histology, anatomy, physiology, pathology and cardiology, the present study was planned to provide this basic information in this area.

A detailed study was conducted on the SAN of two and four month old fetuses (n= 4 each). Its shape was relatively cone shaped. The dimensions of the node in four month fetuses were 0.28mm in length, 0.42mm in width and 0.50mm in thickness, where as, in two month fetuses it measured 0.44mm in length, 0.28mm in width and 0.13mm in thickness. The cells of the SAN in the heart of ovine fetuses were occurred as strands of

cells. There were color differences between those and the ordinary myocardial cells of the right atrium. This difference was greater in four months old. Also, the amount of the collagen frame and nerve supply of the node was greater in four month fetuses. In general, the percentage of "P" cells in the SAN of ovine fetuses was high and the number of these cells was higher in two month fetuses compared with four months old. There were one or some arterioles near the periphery of the cranial end or at the interatrial septum, which supply it.

Also, the results were compared with the available data on the SAN of human being and others animals.