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HISTOLOGY OF ATRIOVENTRICULAR NODE AND ATRIOVENTRICULAR BUNDLE IN THE DROMEDARY CAMEL FOETUS

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ABSTRACT

Atrioventricular node (AVN) and Atrioventricular bundle (AVB) development in the camel heart was studied during the 1st, 2nd and 3rd trimesters of gestation using histological techniques. Thirty hearts of camel foetuses were used in this study. Specimens were collected from Tamboul and Al-Salam slaughterhouses, Sudan. The samples were prepared by routine histological procedures and stained by the general histological stain (H&E) and some other special stains. AVN was found close to the atrioventricular opening in the 1st trimester and close to the opening of the coronary sinus in the 2nd and 3rd trimesters. It generally appeared as a group of large-sized and lightly stained cardiac muscle cells. AVB was embedded in myocardium in the 2nd trimester as a bundle of lightly stained fibres either located between the endocardium and myocardium or within the myocardium; in the early stages of the 3rd trimester they appeared as groups of fibres which were covered by connective tissue between the endocardium and myocardium. It was concluded that the AVN and AVB showed very important histological developmental changes throughout the 3 gestational stages.

Key words: Atrioventricular bundle, atrioventricular node, camel, foetus, histology