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Islet - Cell Innervation in the Pancreas of Lacerta laevis (Lacertidae, Sauria)

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Introduction

In spite of several studies of the innervation of pancreatic islets in different species, there are still contradictory reports about the regulation of endocrin cells (1). The aim of this research is to define the fine structural inervation of that cells in L. laevis and to discus the possible functional significance of these observetions.

Material and Methods

The pancreatic tissue of L. laevis were dissected out rapidly. Cacodylate-buffered glutaraldehyde and osmium tetroxide were used fors fixation. Thin sections stained with uranyl acetate-lead citrate were examined in JEOL 100 C transmission electron microscope.

Results and Discussion

After definition of A,B and other cells of islets, the nervous elements which innervate these cells were distinguished and classified according to their localizations and ultrastructural properties. Although similarities and differences of fine structure of nerve fibers were established in comparision with some other species (2,3). It is very difficulty to give some conclusions about the types of neurotransmitter. By other means external and internal regulation mechanisms in the pancreas of L.Laevis were still needed to pay more attention.

References

- 1. Jonson, A-C. Cell Tissue Res. 266:163-172, 1991
- 2. Jirns.A., D. Grube. Ceil Tissue Res. 265:261-273, 1991
- 3. Watari, N. Z. Zellforsch.85: 291-314, 1968