The Morphology of the Testicular Tissue of Unilateral Inguinal Cryptorchid Testes in Children: Electron Microscopic Study

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Objective: The aim of this study is to review the ultrastructural changes of the inguinal cryptorchid testes of children at different ages.

Method: Children between one and sixteen years old with inguinal cryptorchid testes, referred for surgical correction were biopsied. The testicular tissue obtained was processed for electron microscopical examination.

Setting: Princess Basmah Teaching Hospital in Irbid-Jordan.

Design: Prospective study.

Result: The process of cellular differentiation in the seminiferous tubules was slow or embryologically arrested. There were progressive degenerative changes and increased thickening of the basement membrane as the duration of testicular retention in the inguinal region increased.

Conclusion: The ultra-structural changes of the inguinal cryptorchid testes were advanced time wise. Further studies to define the time needed for irreversible changes to take place to help in better timing of the surgical correction without losing fertility.