

Protocol for the Vaginal Direct Cytology of Laboratory Rats

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Abstract

Introduction. Cytology in vaginal rats is important for the diagnosis of gestation.

Objective: To design a protocol for the vaginal direct cytology of laboratory rats and the application in the diagnosis of gestation.

Materials and methods: The information that appears in literature and the experience of 10 years of research in Wistar rats following the very ethical established beginnings were combined. Representative images of the cell guys, as well as of the phases and transitional states of the estrous cycle, obtained with light microscope and digital camera Motic, were selected.

Results: A protocol was obtained that includes: a) Introduction, with the foundation of the method; b) Procedures for the obtaining of the sample and the cares to consider; c) Procedures for the observation and analysis of the sample; d) Interpretation of the results, that contains the determination of the phases and transitional states of the estrous cycle, the relation with the endocrine state and the factors that can have influence. In each part the protocol includes photos and figures representatives to illustrate the text.

Conclusions: The designed protocol details noninvasive, simple, and economic procedures for the vaginal direct cytology of laboratory rats and the applications in reproduction researches.

Keywords: vaginal direct cytology, rats, gestation