University of Zabol

Graduate school

Faculty of Veterinary Medicine

Department of Pathobiology

The Thesis Submitted for the Degree of Doctor of Veterinary Medicine

Comparison of plastination of healthy and lesioned tissues of hen and rat by using polyester, silicone and epoxy resin materials.

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Abstract:

Today, the importance of using anatomical models (mollage) is not hidden. Anatomy models are one of the important teaching tools and according to the type of model, they can show a good view of the parts of body tissues. Depending on the type of use, anatomical models are produced and used either as an overview of body parts with less detail or as a single part with more detail. Medical molds are generally made of PVC, rubber or latex with high strength. Therefore, the mollages that are usually used in teaching and training are schematic examples and cannot display the actual dimensions and details of organs and devices. The purpose of this study is to examine and make anatomical models of some internal organs using different methods and raw materials and then compare them in terms of quality, strength, degree of incorruptibility, etc. The difference between the prepared and examined models in this study and other current anatomy models is the use of the examined animal organ itself and the creation of conditions for incorruptibility for a more detailed and long-term scientific study. After examining the models in terms of quality, strength and durability obtained, it can be said that the use of this method is very useful for making models and samples for various pathology investigations. Also, using this method to discuss parasitology and making parasitic models for investigation and training can be another popular application of this method.

Keywords: Plastination, Anatomic model, Rat, Hen, Fixation, Silicone, Polyester resin, Epoxy resin