

Problem of the long-term preservation of anatomical specimens

E.I.BORZYAK, I.N.PUTALOVA

The basic stages of one of the most important methods in anatomy - the method of fixing and long term storage of cadaveric material. After the discovering of formaldehyde, which was recognized as a major catch. Since the late 70s of XX century, came for replacing a method of plastination, anatomical specimens after fixation in formalin impregnate with plastic masses, contributing for their long-term storage.

In general, the method of plastination is a physical process (not chemical), treatment of the prepared whole bodies, body parts, individual organs or organ systems.

The first stage of plastination - preparation of a fixed only with formalin (no more than 12%) body. On the quality of execution preparation at this stage depends the quality of the resulting plastination. On the process of preparation discharge the 70% of all the work of plastination.

The second stage of plastination - is dehydration and degreasing the preparation. This process can be carried out with acetone or alcohol. The process is slow and lasts 2-3 months. Practically it does not require work other than observation.

The third stage of plastination - soaking it dewatered and fat-free preparation of the reactive polymer - silicone. Its duration 1.5-3 months. It also requires no work other than observation.

The fourth stage of plastination - is mounting and installation the silicone impregnated preparation and certain parts in specific position with the removal emerged damage or displacement of anatomical structures. It will be limited near 20% of the total work of plastination.

The fifth stage of plastination - the preparation is impregnated with silicone and mount, installing in a closed chamber, where the liquid silicone formulation under exuding from the influence of steam curing polycondensed (changes from liquid to solid).

The sixth stage of plastination - the removal of all installation devices and final preparation of cured prepreparates. It will be limited near 5% of all work of plastination.

Manufacturing of plastinated preparations under the force of each anatomist, physician, skilled preparator, laboratory assistant.