ORAL PRESENTATION ABSTRACT

1.7. "Plastination at Room Temperature. Modified Technique Using Long-Conserved Reagents". "Plastinación a Temperatura Ambiente. Técnica Modificada Usando Reactivos Largamente Conservados".

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Introduction: The plastination technique is a preservation technique described by Dr. Gunther Von Hagens in 1977. Among the techniques described is the one performed at room temperature, which was modified by Ottone et al. in 2015.

Material and method: In this work we used the modified room temperature plastination technique and the reagents used were Biodur ® S-10 silicone, Biodur ® S-3 catalyst, Biodur ® S-6 for curing. These reagents were acquired by the Department of Anatomy of the Faculty of Veterinary Sciences of the University of Buenos Aires in 2001. Together with the pump and the vacuum chamber that were used in the forced impregnation. Curing is done in a flexible chamber built in the Chair. A porcine heart, a canine fetus and a mare ovary were used, as well as thick sections of rat abdomen. Work was also done on a capuchin monkey head (Cebus capucinus) that had been fixed in 10% formaldehyde for a long time in the Anatomy Museum. Both in the canine fetus, the porcine heart and the mare's ovary, longitudinal or transverse section was performed, using or not prior fixation in formaldehyde solution. The fixed pieces were rinsed under running water for 1 day and then proceeded with cold dehydration with previously cooled acetone. Increasing concentrations were used over a period of 3 weeks. Once the piece is dehydrated, it is kept in silicone for 2 days at room temperature and then continues with the impregnation in the vacuum chamber. It is allowed to drain for 24 hours outside the vacuum chamber and then continue removing the excess silicone with absorbent paper, before placing the piece in the curing chamber with the hardener.

Results: The results were evaluated by assessing the organoleptic characteristics of the pieces obtained. In all of them it was possible to preserve the macroscopic aspect, colours and texture of the pieces. An acceptable level of shrinkage was recorded in all.

Conclusion: The reagents used (S-10; S-3; S-6) despite being over 22 years old showed great effectiveness since pieces with very good characteristics were achieved.