Obtaining Bones from Dried Cadaver- A Poilet Study

K Vijay Ananth

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Author's Affiliation: Associate Professor, Department of Anatomy, National Institute of Homeopathy, Kolkata 700106, West Bengal, India.

Corresponding Author: K Vijay Ananth, Associate Professor, Department of Anatomy, National Institute of Homeopathy, Kolkata 700106, West Bengal, India.

E-mail: vjananth74@gmail.com

Abstract

Introduction: The aim of the present study was to obtain Cadaveric Bones from a Dried Cadaver which was decomposed from a donated body. Left in a tub for 2-3 years as not able to dispose the dried up cadaver this study was attempted based on one article for obtaining the bones for study for the undergraduate students and preservation as museum specimen for this college.

Keywords: Cadaveric Bones; Dried Cadaver; Donated body; Museum specimen.

Introduction

It has been a tedious process of procuring Human bones and distribution for study at undergraduate levels to all the students or rather procurement and purchase for their study. It has been a business for the underprivileged community, to do the tedious process of burial, treating a fresh body to get the bones involving cost, space and labour. Over all the cost incurred was very high.

So in the current crisis a alternative method of preserving the cadavers or formalin treated bodies were done to procure the bones for the study and as museum specimens.



Materials and Methods

A Cadaver was received from the free donation with due formalities into the Department of Anatomy few years back. It was soon found out that during embalming the cadaver started to putrefy and swelled. So, with partial attempt it was dumped in the tank but still was decomposing fast so after due consulting it was put in the tub and left to dry-up. This year we wanted to dispose it off then the bones was much visible though partly formaldehyde treated cadaver then under search online an article came out to show that old burial method formaldehyde treated cadaver can be washed with detergent followed by treatment with hydrogen peroxide and finally painting with turpentine proved to obtain bones for the museum or for study.2 Almost similar studies was done previously by preparation of dry specimen of bones or bone cleaning methods respectively.^{1,3}

With that a pilot study was attempted on that dried cadaver by first breaking the dry joints, scarping off the muscles and tendons. Soaking in water which actually removes the fat, grease and muscle tissue adherent to the bones making it soft and tender. Followed by washing several times in tap water and soaking in washing powder (detergent) for two days which involves a process of saponification.² Then further scarping and removing the adherent muscle was done, followed

by soaking in hydrogen peroxide (Industrial grade) of 6-7% by diluting with 30% concentrate with tap water and keeping it for 02 days. The white colour chemical treated bones were air dried by keeping in sunlight for few days together to make the bones

loose sticky nature. Then finally were applied with turpentine obtained from paint stores by coated with a brush and dried in open air. At least two coating was done to get the right shine and glitter.



Fig 1: Dried Cadaver in the tub.



Fig 2: Dried Cadaver is by first breaking the dry joints.



Fig 3: Dried Bones are collected from Cadaver



Fig 4: Dried Bones are scarped of the muscles.



Fig 5: Washing with tap water.



Fig 6: Soaking the bones in water.



Fig 7: Removed bones from washing is dried.



Fig 8: It is soaked in Hydrogen Peroxide.



Fig 9: After removing from chemical treatment.



Fig 10: After painting with turpentine and drying

Conclusion

By this above method we could obtain almost a full set of non-articulated bones for readymade use as museum specimens or for teaching and demonstration in classes.

Refrences

1. Muhammad Aaqil Siddiqui . Preparation of dry specimen of bones. JAMC Vol.3, No.1,1990

- Vaishali M. Paranjape, Swati R. Pandhare, BH Bahetee, Anjan Gaikwad. A cost effective and user friendly method for procurement of bones from formalin fixed specimens- a pilot study. Indian Journal of Clinical Anatomy and Physiology, October-December, 2017;4(4):558-561
- 3. Navita Aggarwal 1, Monika Gupta 2, Parmod Kumar Goyal 3, Jaswinder Kaur 4. An Alternative Approach to Bone Cleaning Methods for Anatomical Purposes. International Journal of Anatomy and Research, 2016, 4(2):2216-21.