

Accepted Manuscript

Title: Modern (forensic) mummies: a study of twenty cases

Authors: Céline Leccia, Véronique Alunni, Gérald Quatrehomme



PII: S0379-0738(18)30187-7
DOI: <https://doi.org/10.1016/j.forsciint.2018.04.029>
Reference: FSI 9268

To appear in: *FSI*

Received date: 31-1-2017
Revised date: 27-11-2017
Accepted date: 16-4-2018

Please cite this article as: Céline Leccia, Véronique Alunni, Gérald Quatrehomme, Modern (forensic) mummies: a study of twenty cases, Forensic Science International <https://doi.org/10.1016/j.forsciint.2018.04.029>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Modern (forensic) mummies: a study of twenty cases

Céline Leccia, Véronique Alunni, Gérald Quatrehomme

Céline Leccia, M.D., Laboratoire de Médecine Légale et d'Anthropologie médico-légale, Faculté de Médecine, Université Côte d'Azur, 28 avenue de Valombrose, 06107 Nice cedex 2, France

Véronique Alunni, M.D., Ph.D., Laboratoire de Médecine Légale et d'Anthropologie médico-légale, Faculté de Médecine, Université Côte d'Azur, and CEPAM (UMR CNRS 7264), 28 Avenue de Valombrose, 06107 Nice cedex 2, France

Gérald Quatrehomme, M.D., Ph.D., Laboratoire de Médecine Légale et d'Anthropologie médico-légale, Faculté de Médecine, Université Côte d'Azur, and CEPAM (UMR CNRS 7264), 28 Avenue de Valombrose, 06107 Nice cedex 2, France

HIGHLIGHTS

- Hot and dry environment found indoors are favourable conditions for mummification.
- Emaciation also seems to be a favourable condition for mummification.
- Extensive mummification (indoor) may occur within three weeks.
- Extensive mummification of the skin and decomposition of the viscerae is not rare.

Abstract

Twenty mummies discovered in a forensic context between 2002 and 2016 were compiled in this work. 15 cases were excluded and 15 cases of forensic mummies were found in the literature. In the current work the percentage of mummification was calculated by “the rule of nines” used for describing burned injuries in livings. Dry and hot environments, emaciation, little access to flies are favourable conditions for mummification. Nevertheless mummification was also observed in other cold and humid environments. Extensive mummification (defined in this work as “at least 50% of mummification of the body skin) has occurred in as little as three weeks in the current series. The post mortem interval was estimated by indirect clues. The cause of death was usually impossible to establish.

Keywords: Mummification; Mummies; Forensic Anthropology Population Data; Post Mortem Interval; Autopsy.

Introduction

Mummification results from the dehydration and desiccation of soft tissues. Most of the scientific literature concerns ancient mummies (especially Egyptian and Peruvian mummies). Hot and dry climates are favorable conditions for dehydration [1-5]. Mummification may occur indoors, in catacombs and crypts [6], and occasionally in tanks [7], caskets or sarcophagi [8], or boxes [9]. It can even take place if the body is wrapped in plastic [1,2,6-8,10-12]. Mummification has been known to occur underwater, for example in some marshes of Northern Europe, the result of an acidic and anaerobic environment. In these instances, the mummies remain flexible and retain some anatomical details such as fingerprints and tattoos [13]. Inhumation may also lead to mummification, as can occur in certain sandy soils [1,14]. Salt mummies have also been discovered in salt mines [2,15].

Download English Version:

<https://daneshyari.com/en/article/6550989>

Download Persian Version:

<https://daneshyari.com/article/6550989>

[Daneshyari.com](https://daneshyari.com)