From: "ROOT" <root@sctimst.ac.in>
To: "ROOT" <root@sctimst.ac.in>
Date: 25/03/2025 08:17 AM
Subject: Invitation for CGR

From: "RRC Rishikesh (rrcrishikesh@aiimsrishikesh.edu.in)" <rrcrishikesh@aiimsrishikesh.edu.in>
To:
Cc: Meenu Singh <meenusingh4@gmail.com>
Date: Mon, 24 Mar 2025 20:19:17 +0530
Subject: [EXTERNAL MAIL] Invitation for CGR

Greetings from AIIMS, Rishikesh !!

The CGR will be held on March 25, 2025, in CPD Hall, AIIMS Rishikesh, from **8:00 AM to 9:00 AM.** You can join online through the following link:

Meeting link:
https://aiimsrishikesh.webex.com/aiimsrishikesh/j.php?MTID=m9e6a6cfc1d5f9c2ffe397446dc351330

Tuesday, March 25, 2025, 8:00 AM | (UTC+05:30) Chennai, Kolkata, Mumbai, New Delhi

Meeting number: 2511 360 0216
Meeting password: 250325

Thanks & Regards
Regional Resource Centre
Dept of Telemedicine
AIIMS Rishikesh

DEPARTMENT OF ANATOMY – CGR

(JOURNAL CLUB)

(JOURNAL CLUB-25TH MARCH 2025)	
Name of article	Histological changes in human skin 32 days after death and the potential forensic significance
Journal	Scientific Reports
Impact factor of Journal	4.3
Presenter	Dr. Urvi Sharma
Moderator	Dr. Rajeev Chaudhry

Abstract of the article

Background-The skin is a relatively long-lived body tissue after death. Changes to the skin occur at different times after the death of the body. The general morphology of the skin after death and the changes in histology, biomechanics, temperature, spectral characteristics, microbes, skin resistivity and other factors have been studied, and some progress has been made, but it has not been enough to be applied to actual situations and to be used to infer the time of death accurately.

Aim-To observe the histological changes in human skin within 32 days after death to explore its potential significance in forensic practice.

Material and methods-The intact full-thickness skin and subcutaneous tissue from the sternum of eight corpses were placed in an environment of 4–6 °C for 4 h, 6 h, 12 h, 18 h, 24 h, 36 h, 48 h, 60 h, 72 h, 84 h, 96 h, 6 d, 8 d, 10 d, 12 d, 16 d, 20 d, 24 d, 28 d, and 32 d. Then, the whole layer of the skin was stained with haematoxylin & eosin. The histological morphology of the epidermis, dermis and appendages (sweat glands, hair follicles, and sebaceous glands) was observed under an light microscope.

Result-The epithelial nucleus condensed at 24 h after death, and cell lysis was exhausted after 20 days. The post-mortem changes in the dermis occurred later than that of the epidermis (72 h), but after epidermal changes started, the change was more rapid. At 16 d, the layers had become homogenized. The epidermis and dermis had completely separated 24 d after death. The changes in the sweat glands appeared earlier (24 h) and disappeared later (32 days); the sebaceous glands and hair follicles began to undergo degenerative changes at 96 h after death, and at approximately 20d, only their contour remained. There were individual and structural differences in the post-mortem histological changes in the skin. At 4–6 °C ambient temperature, some structures of the human skin still exist for a long time after death, and these structures can be used to identify the source of the tissue

Conclusion- Post-mortem histological changes in the skin occur at specific times, which can be used to help infer the time of death. A comprehensive observation of changes in the skin composition/structure is required to comprehensively analyse possible death times.