Early Formation of Adipocere in Subtropical Climate

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Abstract : Adipocere formation is a modification of the process of putrefaction. It consists mainly of saturated fatty acids, formed by the post-mortem hydrolysis and hydrogenation of body fats with the help of bacterial enzymes in the presence of warmth, moisture and anaerobic bacteria. In temperate climate, it takes weeks to develop while in India it starts to begin within 4-5 days. In this study, we have collected cases with adipocere formation, which were from the South Delhi region (average room temperature 27-390C) and autopsied at our centre. Details of the circumstances of the death, cause and time of death, surrounding environment and demographic profile of the deceased were taken into account. Total 16 cases were included in this study. Adipocere formation was predominantly present over cheeks, shoulder, breast, flanks, buttocks, and thighs. Out of 16, 11 cases were found in a dry atmosphere, 5 cases were brought from the water. There were 5 cases in which adipocere formation was seen in less than 2 days, and among them, in 1 case, as early as one day. This study showed that adipocere formation can be seen as early as 1 day in a hot and humid environment.

Keywords: adipocere, drowning, hanging, humid environment, strangulation, subtropical climate

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