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Mechanical Asphyxiation in Proximity with Ceramic Surface
SAAMI J. SHAIBANI, Independent Modeling, Algorithms & Analytical Studies (IMAAS), Lynchburg, VA — A lack of air reaching the lungs may involve several components, including obstruction of some part of the breathing path. When such an obstruction is effected by external constriction of the trachea, some level of pressure must be applied over some period of time to cause death by asphyxia. The nature of these physical quantities depends on the anatomy of the person concerned and on the geometry of the circumstances. Special emphasis is placed in this research on the interaction between anatomy and geometry in order to calculate the forces associated with the reported rest position of a deceased female against a bathroom commode. The first step in the analysis is to derive the distribution of body weight for this particular individual by employing extensive anthropometric measurements. This methodology produces an optimum representation with a large number of body segments, whose finite number of arrangements are examined to find the forces at certain points of interest. The values obtained are reviewed to see if the apparent rest position is consistent with elementary laws of physics.

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