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ANALYSIS OF A "BITE MARK" ON AN APPLE, FOR MEDICO LEGAL PURPOSES

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Bite marks on animate and inanimate objects found at a scene of crime may be useful in the identification of suspects/victims. Analysis of such bite marks are relevant, significant and has gained recognition in all systems of administration of justice. Suspects have been convicted based on the evidence obtained from "bite marks".

In Sri Lanka, analysis of bite marks for medico-legal purposes has not gained attention what so ever. Additionally no previous records of such attempts are available.

This paper considers a hypothetical situation where one of 3 suspects (A, B & C) is involved in a crime. An apple with a bite mark was found at the scene of crime.

A volunteer participant "A" was instructed to make a single bite mark (test bite) on an apple provided.

The bite mark was observed, measured, photographed and a cast made by injecting silicone putty material in to the imprint. In addition, casts were made with Acrylic resin material and hard plaster.

Dental casts of participant "A" and another two volunteers "B" and "C" were obtained on dental hard plaster with the help of alginate impressions. These casts were mounted on dental articulators and compared with the casts made from the "test bite" mark.

Further more, "bites" were made on other apples and wax sheets using the mounted casts and compared with the "test bite" mark.

Double-blinded second opinion was also obtained.

Forensic odontological analysis reveals that the "test bite" mark is made by suspect "A", on preponderance of available dental evidence.