Identification and comparison of bite marks

Identification of bite marks

- identifying features:
- 1. The dentition arch which produces 3to 5cm corresponding arched impression on the bitten surface indicates human teeth mark.
- 2. Presence of odd unique tooth(teeth).
- 3. The shape and sizes of the individual tooth which leave corresponding marks in the bite.
- 4. The spacing of the teeth which is reflected in the marks.

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- 5. The existence of missing tooth its position and corresponding dimension of the gap.
- 6. The presence of the broken tooth(teeth) and their registration in their marks in the bite marks.
- 7. The presence of the additional mis-aligned teeth and their marks in the bite marks.
- 8. Repaired, restored, or artificial teeth give individualistic patterns. They are highly significant in the identification of their bite marks.

Identification process

- 1. Examine, measures, and compare the dentition arch with the bite marks, arch in respect of size, orientation and shape etc.
- 2. Compares the sizes, shapes, and orientation of the standard and questioned marks.
- 3. Studies and compares the inter se gap pattern among the teeth.
- 4. Uses 3-D photography of the bite marks and the test marks for better appreciation of the evidence.

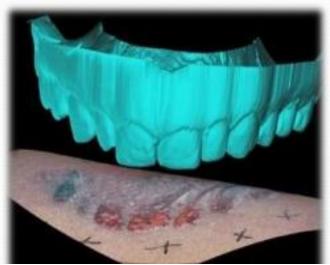
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5. Consults other forensic odontologists before finalization of the report, at list in refractory or borderline cases.

Comparison And Bite Mark analysis

Comparison technique:

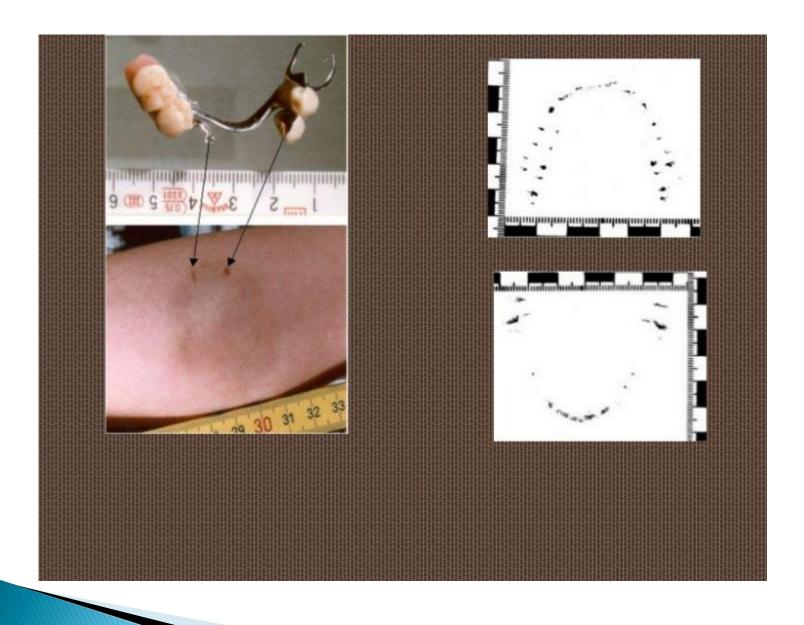
According to ABFO the most widely used method for comparison of bite mark evidence are generation of overlays (acitate), Test bite media eg: Wax exemplars, styroform. Recently software programmes such as Adobe Photoshop is suggested by Johansen and Bowers to compare dental profiles. With its use transparent overlays can be created which are then laid over the bite marks



Several methods of bite marks comparison have been documented in the literature. All the documented methods are chiefly comprised of three steps

- i) Registration of bite mark and suspects dentition
- ii) Comparison of bite mark and dentition
- iii) Analysis of similarity and dissimilarity





Thank you