



F31 Is There a Consensus Between Forensic Dentists on Whether Bruising is Useful in Determining the Amount of Pain Caused by a Bitemark?

Helen York, BSc, Dental Health Unit, 3A Skelton House, Manchester Science Park, Lloyd Street North, Manchester, M15 6SH, UNITED KINGDOM; and Iain A. Pretty, DDS, PhD, Dental Health Unit, Skelton House, Lloyd Street North, Manchester Science Park, Manchester, M15 6SH, UNITED KINGDOM*

After attending this presentation attendees will: (1) understand the drivers for court requests for assessment of pain and distress in family proceedings; (2) appreciate that empirical research cannot answer these questions; (3) understand the consensus view on pain and bitemarks; and, (4) understand the limitations of the research design.

This presentation will impact the forensic science community by highlighting a common area upon which forensic dentists are asked to comment and recognize the difficulties in providing an empirical answer to the problem.

Forensic dentists are often called upon to comment on the degree of pain or discomfort that a child may have experienced following a bitemark. Such issues are often of importance in family court proceedings. Anecdotally it is believed that bitemark injuries that are visible on young children several hours after infliction are likely to have caused immediate and continuing pain. However, there is little in the forensic or biomedical literature to support this belief. Given that empirical research is impossible in this area a study was undertaken to look at the view of a range of professionals.

This was achieved through a questionnaire, which was sent out to a target group consisting of forensic odontologists, community pediatricians, and emergency room staff. A collection of bitemarks on children were combined with scenarios including the age of the child and the time since the injury was inflicted. Using the Wong-Baker pain face scale, the respondents were asked to say how much pain the victim would have experienced at the time of the injury. It was the opinion of the respondents that all injuries would cause some amount of pain and discomfort to the victim. The perceived pain was compared to the average severity and significance score of the bitemarks and this demonstrated a significant positive correlation between the perceived amount of pain and the severity of the wound.

While the intra-class correlation coefficients demonstrated that there was only moderate agreement on pain levels for each individual injury (between all professional groups) there was good agreement that each injury would have been painful and that the pain would have been felt immediately and for some time after. These data are helpful when responding to questions of caregivers knowledge of an injury. **Bitemarks, Pain, Agreement**