

Correspondence

Commentary on: Rompen JC, Meek MF, van Andel MV. A *Cause Célèbre*: the So-Called “Ballpoint Murder.” *J Forensic Sci* 2000;45(5):1144–1147

Sir:

As forensic scientists who carried out some of the work discussed in the article by JC Rompen, MF Meek, MV van Andel. “A *Cause Célèbre*: The So-Called ‘Ballpoint Murder,’” *Journal of Forensic Science*, 2000;45(5):1144–7, we would like to inform you that we disagree with some of the statements in the article.

In this case (which we prefer to call the ballpoint “case,” if only because the Court of Appeal acquitted the suspect on the grounds that it was unable to establish beyond a reasonable doubt what exactly had happened) the Netherlands Forensic Institute was requested by the Dutch Court of Appeal to evaluate—together with experts for the defence—earlier experiments with crossbow and ballpoint pens.

The main comments we have on the paper of Rompen et al. are:

- In the first paragraph of the Results Section of the paper, Rompen et al. state that they could see an impression on the back of the ballpoint pen. This same “impression” is also visible on the ballpoint pen that was recovered from the autopsy. It is important to note that it appears that all ballpoint pens of the same type have these marks. They are extrusion marks that arise in the manufacturing process, and these are in fact slight protrusions rather than impressions.
- The experiments that we carried out did not involve the use of human tissue, since dead tissue has characteristics that differ from those of living tissue. Instead, using an 18 000 images/s high-speed video system, we followed the acceleration phase and the penetration of the ballpoint pen in a model consisting of layers of 20% gelatine (1) (as a substitute for the eye), different plastic materials (as a substitute for the bone between the eye and the brain), and 12% gelatin (as a substitute for

brain tissue). In our experiments with a slightly modified crossbow, the effects described in the article did not always occur. More information on these experiments was published in 1996 (2). The limited number of experiments done by us does not warrant the level of reliability and validity of the conclusions suggested in the article. For these reasons we have to express our disagreements with the last paragraph of the article. An overview of alternative causes of death is given in literature (3).

References

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2. Geradts ZJ, Dofferhoff G, Visser R. Using high speed video in ballistic experiments with crossbows. *Proceedings of SPIE, Investigative Image Processing*. 1996;2942:64–70.
3. Van Duinen M. The transorbital intracranial penetrating injury: a review of the literature from a neurosurgical viewpoint. Kluwer Academic Publishers, 1999.

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