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Concerning the paper by Mall et al., entitled ‘Temperature-based death time estimation with only partially environment conditions’ (Int J Legal Med (2005) 119:185–194)

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Dear editor:

The high-sophisticated curve-fitting procedure for death time estimation in cases where the environmental temperature at the scene is unknown may be helpful. Nevertheless, the 35 examples of real cases as demonstrated do not prove the significance of the procedure. If one computes the time of death by the model of Henssge using the first rectal temperature ‘ T_{R1} ’ only (Table 2) which

has been taken after admission to the medico-legal institute and if the environmental temperature inside the institute is taken for comparison (‘ T_E ’; Table 1), the estimation bias is less than that using the special fitting procedure. Assuming an approximate Gaussian distribution of the differences between real and estimated time of death, the standard deviation is 1.9 using the fitting procedure and 1.5 using the simple model, respectively. When using the latter in cases with rectal temperatures over 37.2°C (nos. 1, 13, 26 and 31), the rectal temperature at the time of death was set to 39°C, as usual in our casework.

To provide evidence for the curve-fitting procedure, examples are necessary in which the environmental temperature at the scene is known and very different compared to the recording procedure within the walls of the institute.

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