

Invited commentary on diagnostic accuracy of postmortem computed tomography, magnetic resonance imaging, and computed tomography-guided biopsies for the detection of ischaemic heart disease in a hospital setting

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This editorial refers to ‘Diagnostic accuracy of postmortem computed tomography, magnetic resonance imaging, and computed tomography-guided biopsies for the detection of ischaemic heart disease in a hospital setting’ by I.M. Wagenveld et al., pp. 739–748.

The authors around Dr Wagenveld et al.¹ investigated postmortem computed tomography (CT), magnetic resonance imaging, and CT-guided biopsies as alternative postmortem examination techniques for deceased patients who suffered from ischaemic heart disease.

Since almost 20 years postmortem imaging has been increasingly implemented in the forensic environment to examine corpses. Especially, over the past decade postmortem MR proved to be feasible to non-invasively diagnose ischaemic myocardial alterations. Even age staging of the myocardial lesions is possible by comparing the signal intensities in T2-weighted short axis images. Especially in very early stages (peracute infarction) postmortem MR seems to be more sensitive to ischaemic lesions than the human eye is at autopsy possibly due to tiny changes of the tissue pH-value and local oedematous reactions.^{2–5}

In the forensic setting, postmortem MR is intended to improve the sensitivity for the detection of ischaemic lesions, and it is used as an additional and not as an alternative technique. However, the experience made in the forensic setting allowed meanwhile to broaden the application of postmortem cross-sectional imaging into the area of clinical pathology, which suffers from declining autopsy rates since decades. The present publication is an important step in pushing

postmortem imaging from the forensic use into the clinical setting and provides valuable results to justify its application as alternative postmortem examination technique for the clinical patient. I would like to congratulate the authors on this milestone. In the clinical environment postmortem imaging will help to counteract the loss of valid postmortem information due to the declining clinical pathology autopsy rates. Clinician’s will get the consent of the next of kin easier for this non-invasive or minimal-invasive imaging examination compared to the hesitations they experience when asking for consent for an autopsy. This will have a positive effect on the amount of postmortem diagnostics in general as well as on the quality of the national mortality statistics. This development has to be further promoted!

Conflict of interest: None declared.

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