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Finding the heart of the problem: A letter to the editor on 'Detection of oesophageal course during left atrial ablation' by Santoro et al.

In their recent article, Santoro et al. [1] studied the course of the oesophagus and its anatomical relation to the posterior left atrium via the use of intracardiac echocardiography (ICE) with 3D mapping. This study confirms what we already know-the oesophagus is vulnerable to thermal injury during left atrial ablations. Improved detection of the oesophageal course on its own is of limited use but coupled with effective oesophageal protection, it would improve the safety of the procedure. There have been some recent advances in the study of oesophageal protection methods, which can be used with ICE.

Although temperature monitoring probes have been used routinely for many years in left atrial ablation, there was no randomised trial evidence regarding their efficacy. Evidence has now emerged from the OPERA trial: The strategy appears not to work. In the trial, temperature monitoring did not reduce the number or severity of endoscopically detected thermal injuries compared to ablations performed without monitoring [2]. Of course, only one model of probe could be investigated in the trial and there are many on the market. Ex-vivo experiments demonstrate important differences between probes [3], so the negative result may not be generalisable to all models but is an inauspicious start for so old a method.

We must add an option that can be used with ICE, if preferred by the operator: Active thermal protection. The IMPACT study [4] showed that a temperature control device (ensoETM®, Attune Medical, Chicago IL) used to control oesophageal temperature during ablation reduced oesophageal thermal injury by 83.4% compared to control procedures with temperature monitoring. There was no device-related trauma and no reduction in indices of clinical success. The device is routinely used in intensive care and costs less than some temperature monitoring probes.

A multi-centre trial is underway in addition to an evaluation of the use of the ensoETM® device during left atrial ablations performed under conscious sedation. There is a lack of study of oesophageal protection in ablations performed under conscious sedation, but this device has shown us that this is feasible and similar to patient tolerability of any orogastric probe with local anaesthetic spray and sedation. Our perspective as users is that this simple solution can be used with all current ablation methods.

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Declaration of competing interest

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