Reprocessing of electrophysiology catheters in EHRA countries. An EHRA Young EP survey

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Topic(s):
Catheter Ablation of Arrhythmias

Citation:
Introduction: Reprocessing of electrophysiology (EP) catheters in daily routine varies through countries and may depend on national laws, catheter (cath.) models or supplier. Data on reprocessing of EP materials is sparse and remains a matter of controversy. The aim of this study is to collect data on reprocessing usage through EHRA countries.

Methods and results: A structured online questionnaire comprising 27 questions was distributed among electrophysiologists in EHRA countries. Two-hundred-and-two participants from 34 countries completed the survey (161 males, 36.8±5.8 years old). Overall, 111 (55%) of respondents currently use reprocessed materials and 30 (15%) have used them in the past. Cables, diagnostic cath. with deflectable curve and diagnostic cath. with fixed curve were the most frequently reprocessed materials (87%, 80% and 78% respondents, respectively). Maximum number of times (median) a cath. was usually reprocessed was 6 for diagnostic cath. and 5 for ablation cath. Among potential benefits of reprocessing, cost reduction for the providing hospital (65%), cost reduction for the health provider (42%) and making EP procedure available for more patients (42%) were most frequently reported. Respondents reported a need to change the reprocessed material due to its insufficient functionality in around 15% of cases. They were also concerned about the quality of the reprocessed material (58%), contamination issues (52%) and loss of precision (47%). Nineteen (17%) users of reprocessed EP material reported at least one complication potentially related to the reprocessing during their whole reprocessing experience. Sixty-six (73%) respondents who did not use reprocessed EP material would consider using it in the future.

Conclusions: Reprocessing of EP material is heterogeneously managed among the EHRA countries, as wide differences are present in terms of national and local regulations, clinical practice and technical aspects. Nonetheless, the current data show that European electrophysiologists consider the use of reprocessed EP material as generally safe and cost-effective.