A survey-based study assessing duodenoscope reprocessing methods in Europe

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Objective

Multiple infection outbreaks caused by contaminated patient-ready duodenoscopes have been reported worldwide. This have led to an increased focus on the reprocessing of duodenoscopes used for endoscopic retrograde cholangiopancreatography (ERCP)^{1,2}.

We aimed to investigate the use of reprocessing methods at different endoscopy facilities in France, Germany, and UK by sending out an electronic survey to gastroenterologist performing ERCPs.

Methods

Between February 17, 2020 to March 16, 2020 a total number of 105 gastroenterologists performing ERCPs answered an electronic survey concerning duodenoscope reprocessing methods in France, Germany, and UK.

The number of responds were equally distributed amongst the three countries (35 respondents in each country). Data were collected using QuestionPro and analyzed in Microsoft Excel.

Results

Across the three countries, data showed that 33% of all ERCP physicians were unaware of the reprocessing method used at their edoscopy unit. Thirty-five percent (35%) of the ERCP physicians report using high-level disinfection (HLD), and 28% report using double HLD (dHLD). Only 5% of the physicians report that they are using HLD in combination with ethylene oxide (EtO) gas sterilization. When asked about their anticipated contamination rate of the duodenoscopes used for ERCP, the average stated contamination rate was 15% across all countries. Amongst the three countries, UK physicians stated the highest contamination rate of 20%.



Average stated contamination rate

Conclusion

This study highlights the need for educating endoscopy staff on all levels about the importance of proper reprocessing to minimize cross-contamination.

More than 1 out of 3 ERCP physicians were unaware of the reprocessing method used at their endoscopy unit.

Additionally, all three countries state anticipated contamination rates ranging from 12% to 20% on average, which corresponds with findings from previous studies.



were unaware of the reprocessing method used at their facility

Country	Reprocessing method (mean)	Anticipated contamination rate (mean)	Annual ERCP volume (mean)
Germany	HLD: 32% dHLD: 24% HLD + EtO: 12% N/A: 32%	12% (+ 3.14%)	418 (+ 38.09)
France	HLD: 40% dHLD: 37% HLD + EtO: 0% N/A: 23%	13% (+ 2.64%)	268 (+ 33.45)
UK	HLD: 31% dHLD: 23% HLD + EtO: 3% N/A: 43%	20% (+ 4.28%)	412 (+ 36.58)

References

