

Response to: Comment on 'Surgical experience and identification of errors in laparoscopic cholecystectomy'

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Dear Editor

We thank Dick *et al.* for their correspondence on 'Surgical experience and identification of errors in laparoscopic cholecystectomy' and welcome the opportunity to respond.

This correspondence has highlighted the nuance of surgical error. It is certainly true that dissection in the incorrect plane could be either be cognitive/procedural or technical/executional. We agree that the former is more likely in a more junior surgeon. Perhaps the assumption of our study's participants was that, on balance, an error in this context would be more likely technical/executional, given the absence of surgeon data, and knowledge that cases were performed by consultants, and published by a leading academic and clinical training unit².

We hypothesized and agreed that there is subjectivity in the interpretation of surgical errors, particularly with junior participants. The impact of subjectivity on the application of the Observation Clinical Human Reliability Assessment was considered in the discussion in addition to the limitations and external validity of our study; perhaps we could have considered this point further. It was encouraging that our results showed consistency with previous research³, and we limited our interpretation to that of expert performed operations in keeping with our data set. Ideally, video analysis studies should include a full complement of surgeon and patient data to allow the evaluation of this distinction and would be crucial for further prospective studies that could further contribute to standardization and support artificial intelligence studies.

Author contributions

Gemma Humm (original writing, editing, review and final approval), Adam Peckham-Cooper (editing reviewing and final approval), Jessica Chang (final review and approval), Roland Fernandes (final review and approval), Naim Fakih Gomez (final review and approval), Helen Mohan (editing reviewing and final approval), Deirdre Nally (final review and approval), Anthony Thaventhiran (final review and approval), Roxanna Zakeri (final review and approval), Anaya Gupte (final review and approval), James Crosbie (final review and approval), Christopher Wood (final review and approval), Khaled Dawas (supervision, review, editing and final approval), Danail Stoyanov (supervision, review, editing and final approval), and Laurence Lovat (supervision, review, editing and final approval). All authors are members of original study team.

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