

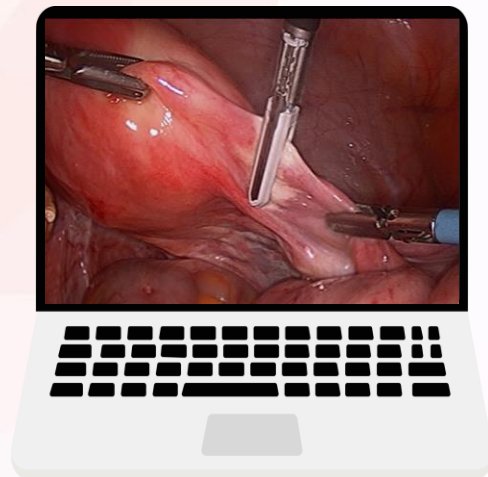
Surgical video editing by trainees as an educational tool: A pilot project

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Introduction

Surgical video editing as an education tool is underutilised in obstetrics and gynaecology (O&G).

The process and outcomes of editing surgical videos has not been widely studied in the literature.

Multimedia based training can show benefits related to improved surgical performance (1), while also allowing self reflection, coaching, mental rehearsal and objective surgical quality assessment. Video review has been demonstrated to improve anatomy knowledge in surgery planning and implementation (2).

Objectives

This novel session aimed to introduce the principles of surgical video editing to RANZCOG trainees at a tertiary hospital, to aid in learning surgical anatomy and procedural steps.

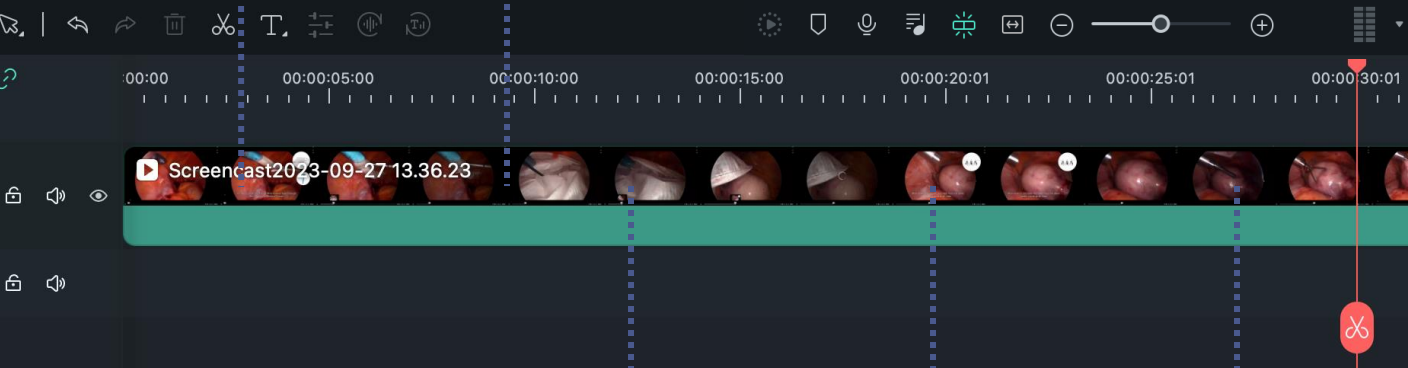
By completing the educational session, the investigators hoped trainees would acquire a newfound sense of interest in the technology and its educational value.

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Methods

A 3.5 hour video editing session was facilitated by four doctors experienced in surgical video editing, and was attended by seven O&G registrars. Participants were provided with pre-reading including various pre-recorded videos discussing surgical video editing technique, image capture, storage and medico-legal considerations.

The teaching session included two presentations followed by an interactive video editing demonstration session of a standardised total laparoscopic hysterectomy (TLH) using the program Wondershare Filmora. Participants worked in pairs to edit and then present a portion of the TLH video.

Pre and post workshop surveys were completed to provide qualitative feedback.

Results

None of the participants had prior experience recording or editing surgical videos. Participants showed interest and a willingness to learn during the interactive session.

Perceived barriers to video editing (pre-workshop) included:

- “ *Unsure how to do it and how to obtain consent.*
- Had thought about it but had not yet been able to work out how to due to operating theatre time constraints.*
- Didn't think I was good enough yet.*

Trainee learning outcomes (post-workshop) included:

- Value of recording videos, how easy it is to edit them.*
- Editing surgical videos can be fun/enjoyable; useful for personal development, as a great teaching aid to share knowledge.* ”

Discussion

This innovative teaching session demonstrated there may be utility in using surgical video editing as an educational tool for surgical teaching in O&G.

Our trainees exhibited enthusiasm and a high level of attention to detail and application when being assigned to edit a section of the TLH video. They were able to apply knowledge from pre-reading materials, felt comfortable expressing their requests for help, and could implement the demonstrated editing techniques in a short time period.

There is scope for this project to be expanded to include other surgical specialties in the future, due to the benefits gained by participants in our pilot and the role technology plays in our everchanging healthcare landscape.

