

Review of: "The Use of Simulation in Endoscopic Retrograde Cholangiopancreatography training: A Literature Review"

Rungsun Rerknimitr

Potential competing interests: The author(s) declared that no potential competing interests exist.

Many thanks for giving me an opportunity to review the manuscript entitled "The Use of Simulation in Endoscopic Retrograde Cholangiopancreatography training: A Literature Review". I found that the manuscript is well written with insightful and practical. It will be useful for all institution and training center in advanced endoscopy that include ERCP. I have a few comments and hope the authors could clarify and amend the manuscript becoming more meaningful for readership.

1. The author demonstrated the different steps in ERCP-training system and I agree with the steps that you provided. A table or graphic to show these steps could make it easier to read. In addition, the therapeutic step should be addressed in more detail, perhaps using the difficulty index by Cotton et al or Schutz et al as a guidance may be more meaningful. For instance, what kind of training model for sphincterotomy should be used? In my opinion, it should be different between standard sphincterotomy and precut in term of the level of difficulty and training. Stenting for common bile duct and hilar obstructions also have different difficulty. The authors may start from duodenoscope intubation step, standard cannulation, advanced cannulation techniques, sphincterotomy, then therapeutic procedure form the basic to advanced therapy if possible.
2. Since this is a literature review, not a systematic review or meta-analyses so risk of bias assessment may not be necessary.
3. Please provide special abbreviations used in this manuscript in the footnotes so these can be searched easily. For instance, ECS, EMS, etc.
4. Please make a table to demonstrate the advantages and disadvantages of ECS, EMS and direct training in human in one table. I suggest making it as a three-column table (EMS, ECS, direct training).
5. Although the figure of ECS (figure 4) representing the external view of the model well, a figure containing the actual use of the model with trainee and a figure to show the appearance of ampulla and cholangiogram could make a more insightful information.