OBJECTIVES

- In the practice of cytopathology, accurate slide interpretation is heavily dependent on adequate sampling and optimal smear preparation techniques.
- We explore the use of a web-based platform as a potential educational resource that can be used to host a series of educational cytopreparation videos that demonstrate some basic sampling and smear preparation techniques in cytology.

MATERIALS AND METHODS

- Instructional video clips were created using a video camera, with and without narration. The processes of FNA sampling, smear preparation, needle rinsing and cell block preparation were illustrated. The videos were edited using Windows Movie Maker.
- An online resource was created using blog.nus, a WordPress based platform. Videos were uploaded onto Youtube and embedded into the web.

RESULTS

A prototypical cytology web resource was created, called Cytoweb. This comprises several sections:
- Sampling Technique – How to perform a fine needle aspiration (FNA);
- Smear Preparation Technique – How to optimally smear, fix and stain samples
- Specimen collection for ancillary tests – How to perform needle rinse and collect material for making cell block.

The blogsite also allows for viewer comments, which creates a more interactive learning environment.

Figures 1 to 3 below show screenshots of instructional videos embedded from Youtube.

Figure 1. Sampling Technique: How to perform a fine needle aspirate.

Figure 2. Smear preparation technique: How to optimally smear samples

Figure 3. Specimen collection for ancillary tests: How to collect material for a cell block

Conclusion

- Compared to static reference textbooks, video clips provide a more immersive and dynamic learning experience, particularly in the context of procedure-based skills such as cytopreparatory techniques.
- This can be done at minimal cost, and with greatly increased worldwide accessibility.
- For these reasons, we believe that online web resources using video clips are a potentially far-reaching educational resource that can be further explored and developed.