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Minimal pixel resolution for adenomyosis identification in transvaginal ultrasound videos.

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Objectives

We aimed to determine the minimal pixel resolution required for reliable expert identification of adenomyosis in TVUS using MUSA criteria.

Methods

Adenomyosis experts assessed 40 randomized TVUS videos at increasing resolutions. Adenomyosis was classified as present, absent, or not evaluable, with videos removed after three correct assessments.

Results

Assessment time ranged from 40-75 minutes, with resolution requirements varying between participants; 800x600 pixels was sufficient for most videos.

Conclusions

Lower pixel resolution may be sufficient for accurate adenomyosis identification in TVUS. More experienced participants are faster and require lower resolutions.

Highlights

- Minimal pixel resolution is key for efficient storage, transfer, AI development, large-scale data sharing, portable imaging, and sustainability
- Minimal pixel resolution for adenomyosis ultrasound videos was determined
- A resolution of 800 x 600 pixels is sufficient for reliable assessment of adenomyosis in most cases

Figure 1. Summary of the study design.

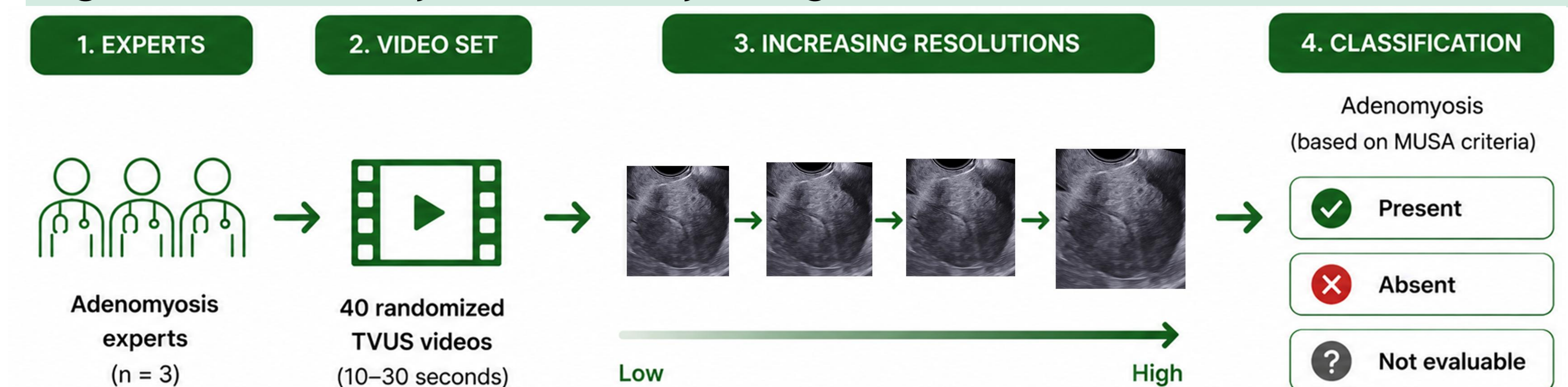
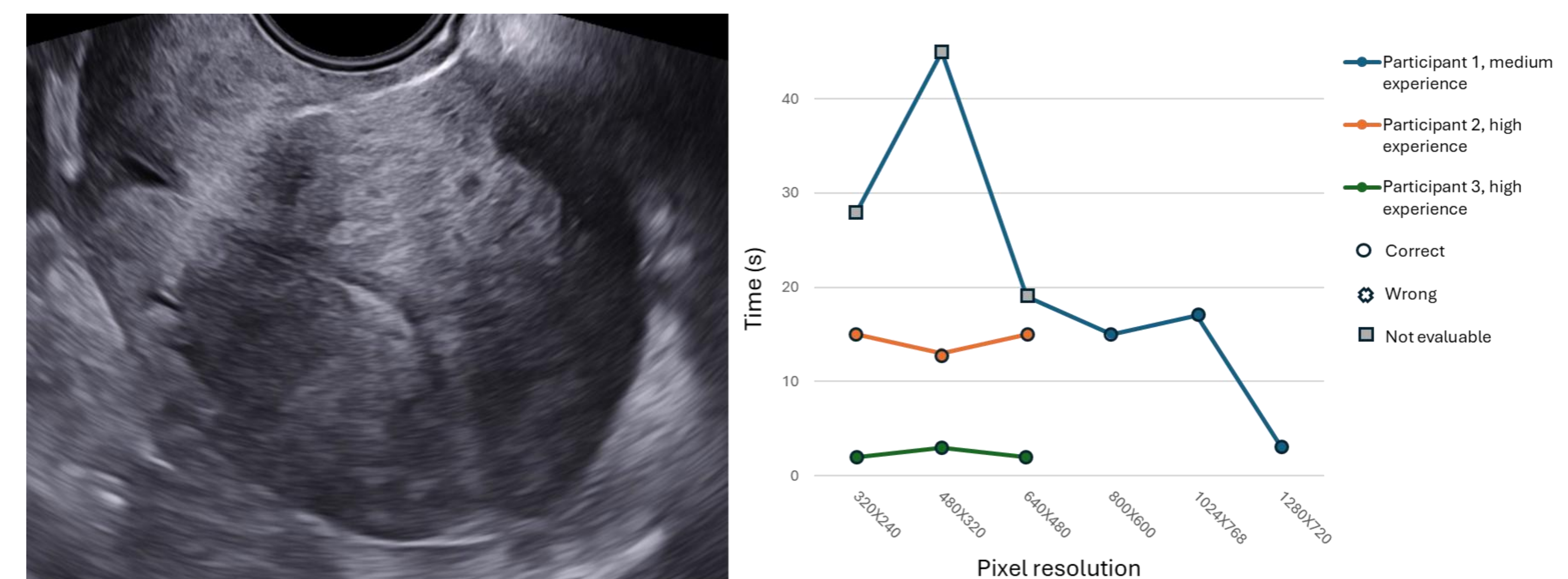


Figure 2. Example of one still from the TVUS video and associated results.



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More info:

