

PELVIC ORGAN ASSESSMENT FROM SUPINE TO UPRIGHT POSITION IN PESSARY USERS

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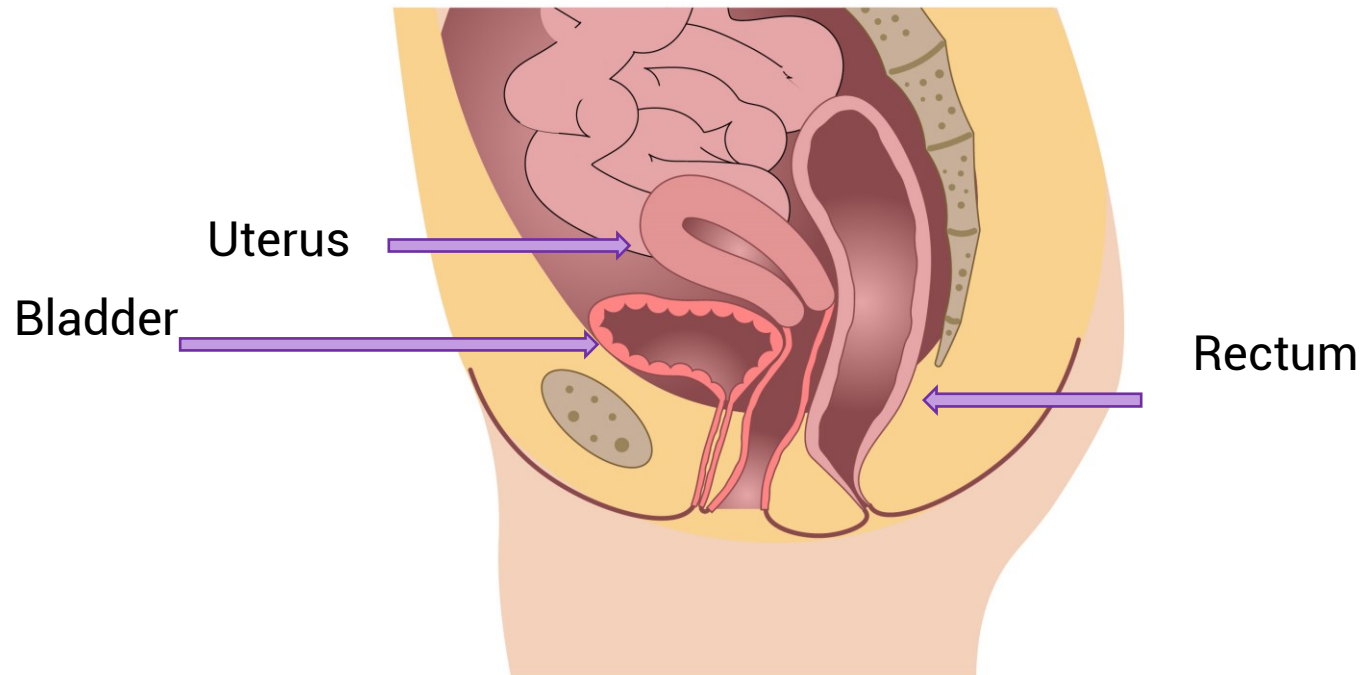
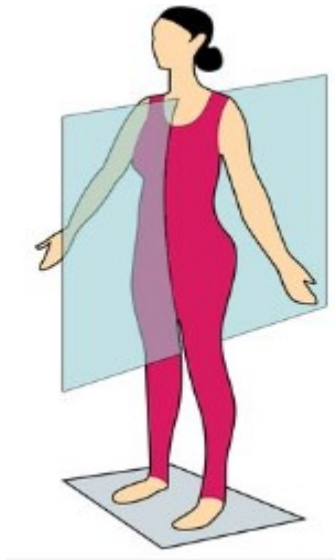
DISCLOSURE SLIDE

Here by I declare not conflict of financial interest

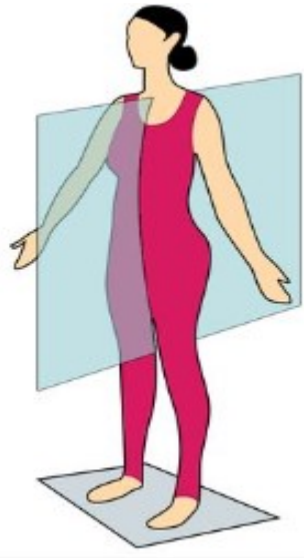


What is POP?

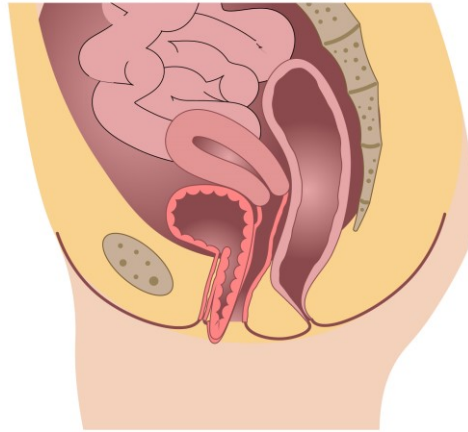
Pelvic Organ Prolapse (POP) is the descent of pelvic organs due to the weakness of the pelvic floor muscles and/or ligaments.



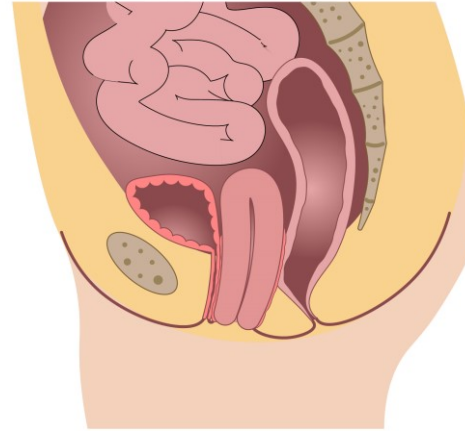
Types of POP



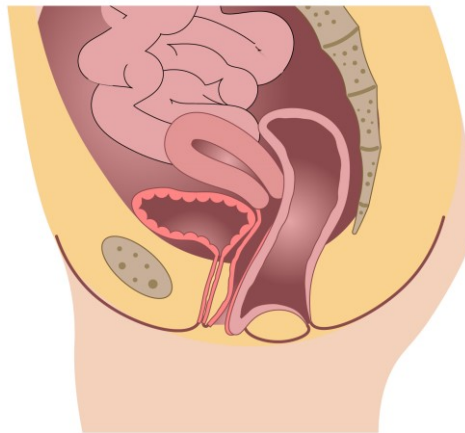
Bladder prolapse



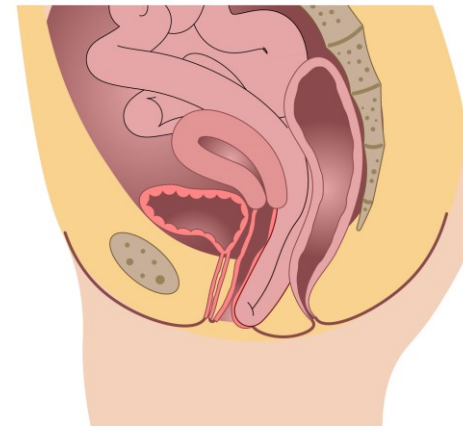
Uterine prolapse



Rectal prolapse



Small bowel prolapse

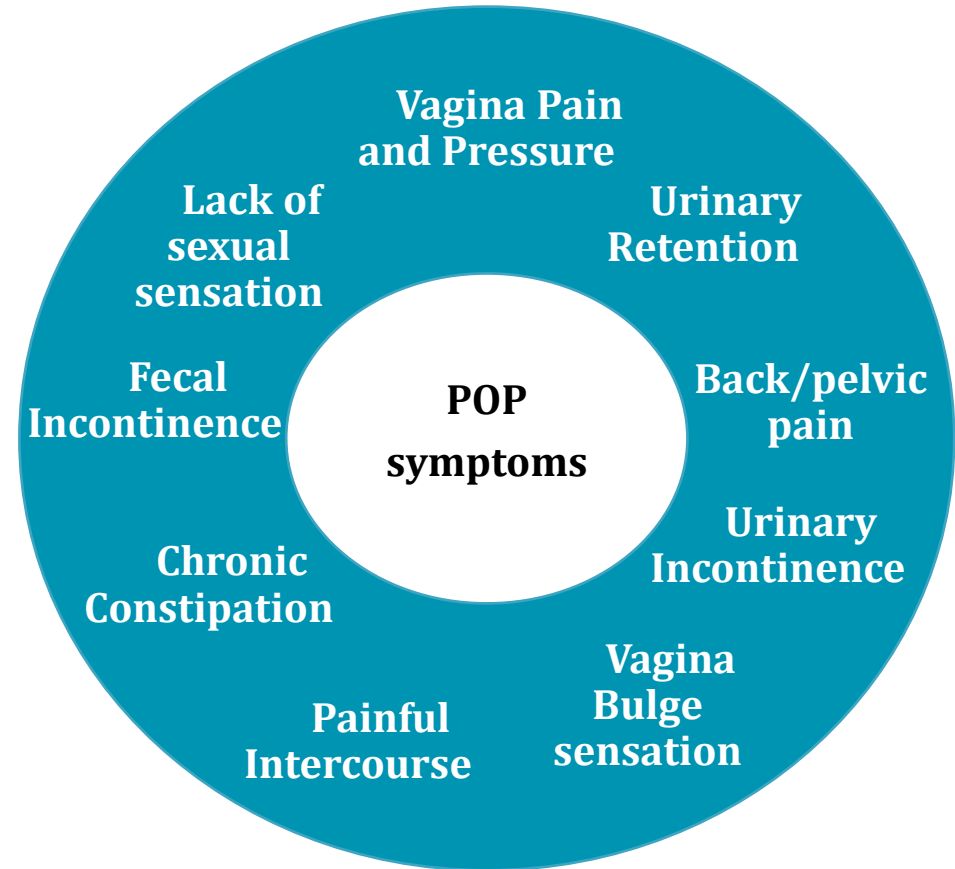


Prevalence

Around 40% of women have POP and 10-20% are symptomatic



Symptoms



POP Treatment

- Surgery
- Pelvic Floor Muscle Training (Physiotherapy)

- Pessary



Bronze pessary,
200 BCE- 400 CE
Roman Empire



Ring Pessary



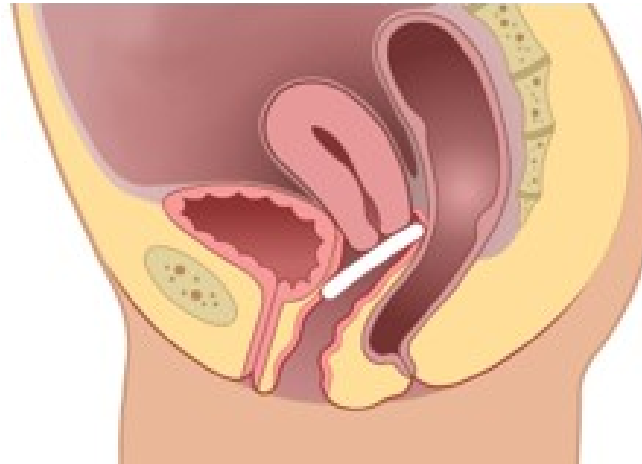
Ring with support
Pessary

1. Sir Henry Wellcome's Museum Collection

Our research

Aim

To evaluate the effect of the change from supine position to upright position on the lowest point of the bladder and cervix while wearing a pessary.



Supine to up right MRI





Method

MRI acquisition

- 0.25T scanner (G-Scan, Esaote SpA, Genoa, Italy)
- Supine and upright position
- From 0 to 81 degree

Population

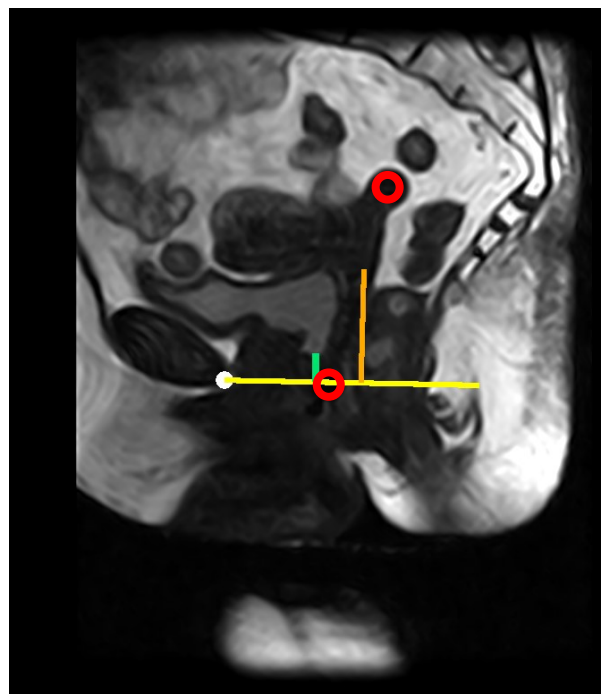
- 15 patients
- Happy pessary users (3 months using it)



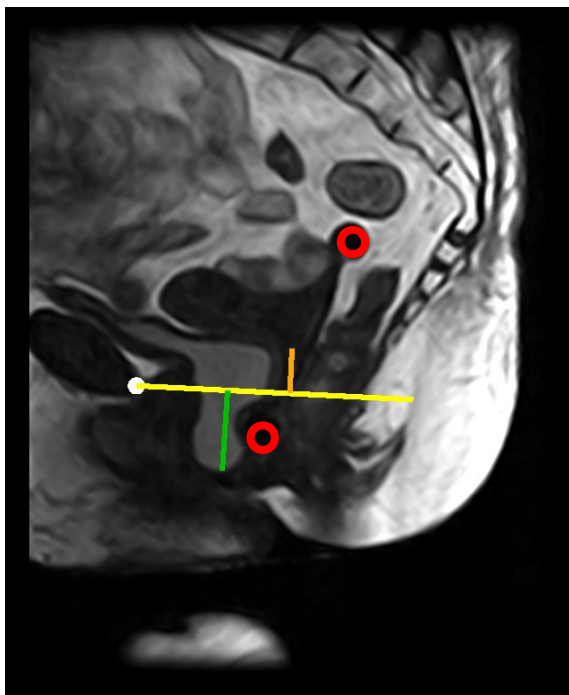
Measurements



Supine



Up right



The visual overlay of the distances on a user-selected MRI sagittal slice

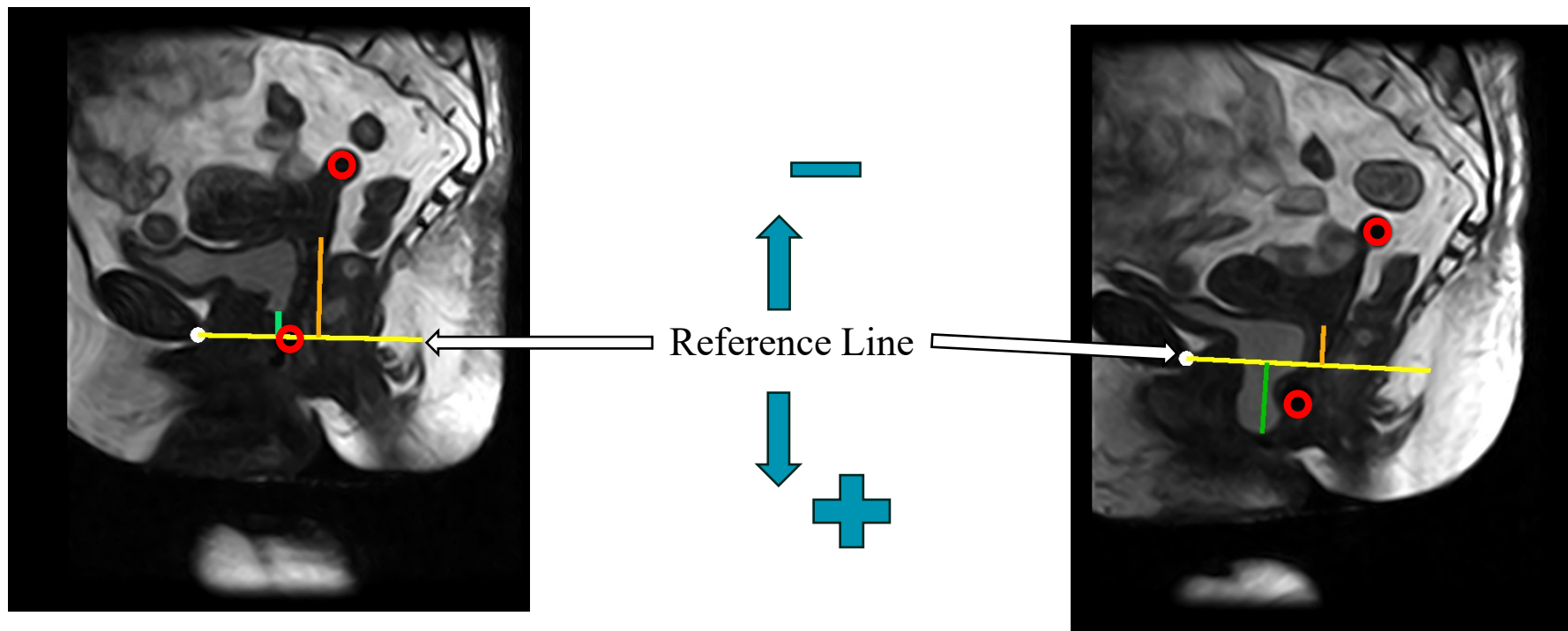


Measurements



Supine

Up right



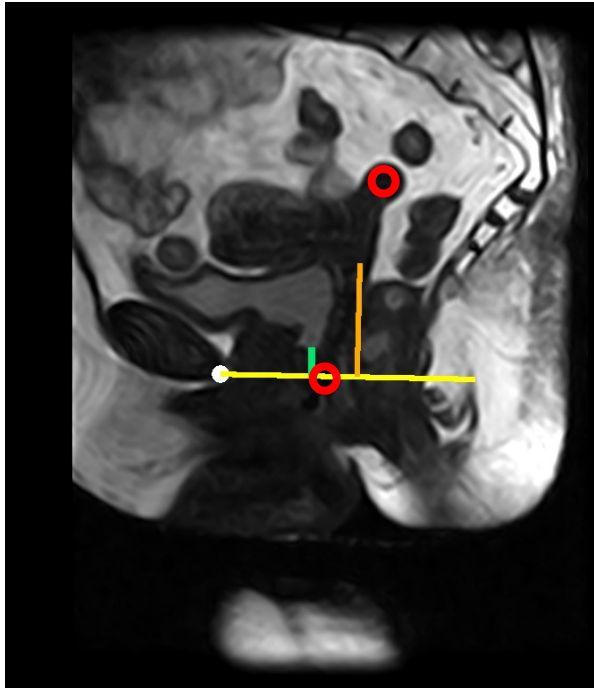
The visual overlay of the distances on a user-selected MRI sagittal slice



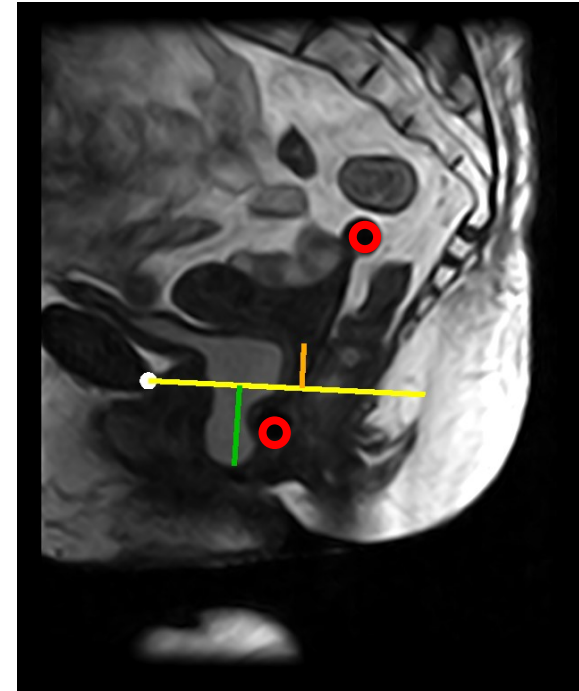
Measurements



Supine



Up right



The visual overlay of the distances on a user-selected MRI sagittal slice

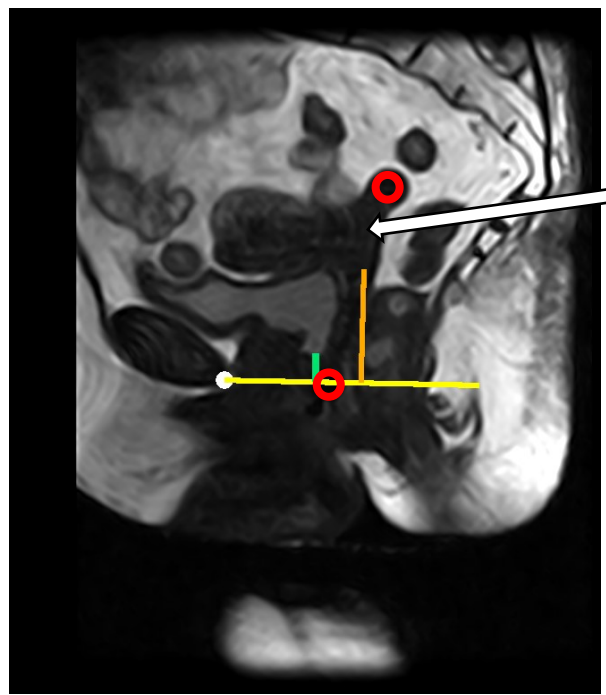


Measurements

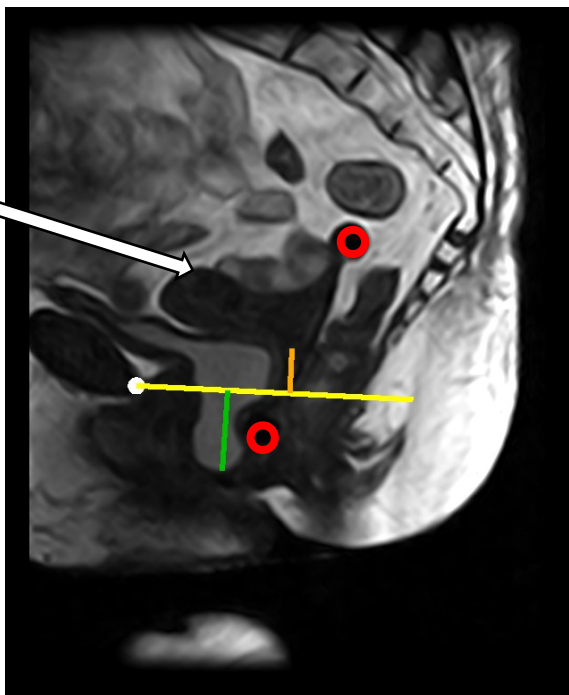


Supine

Up right



Uterus



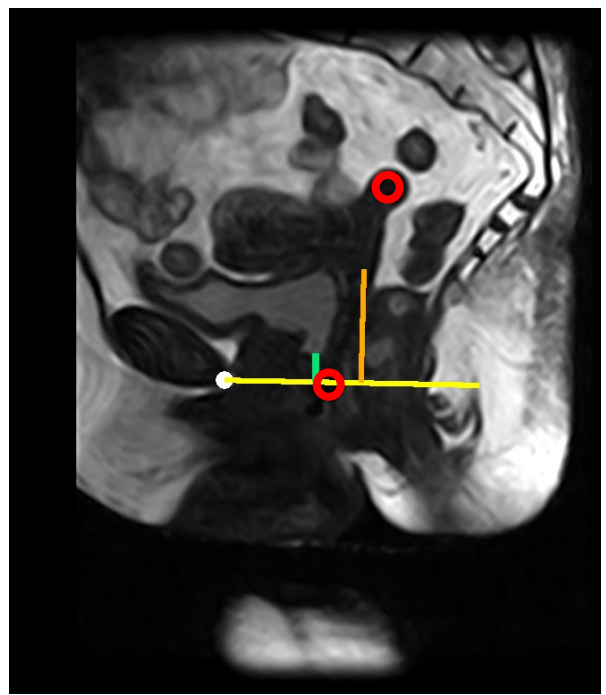
The visual overlay of the distances on a user-selected MRI sagittal slice



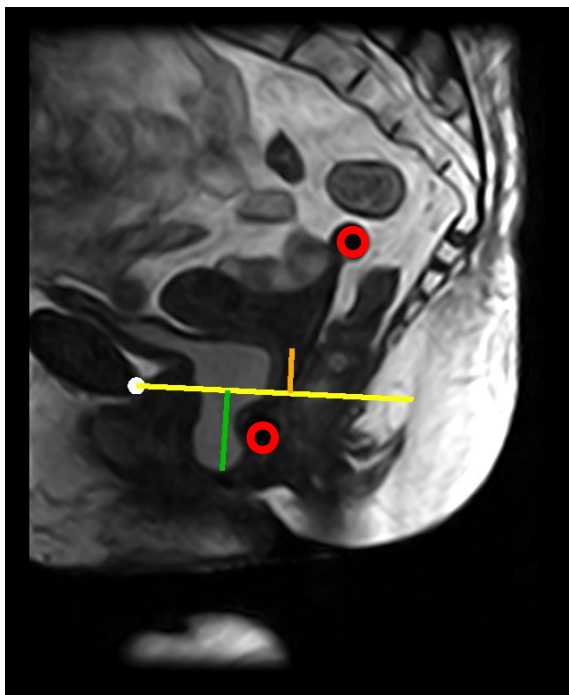
Measurements



Supine



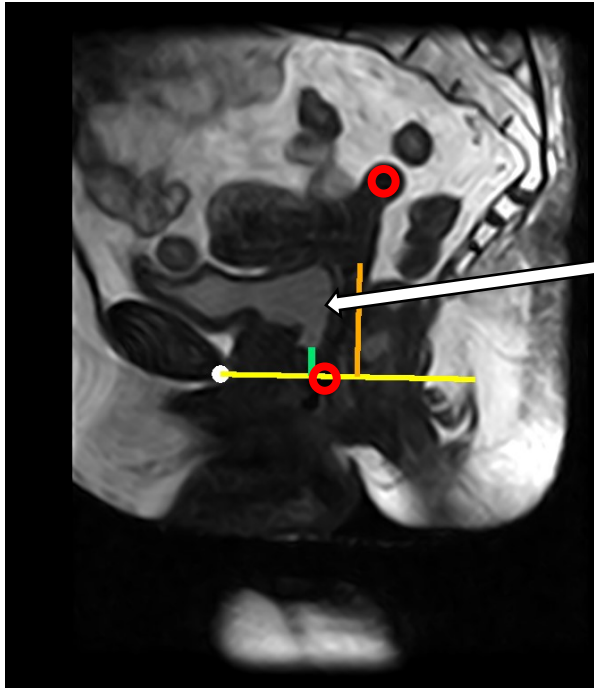
Up right



The visual overlay of the distances on a user-selected MRI sagittal slice

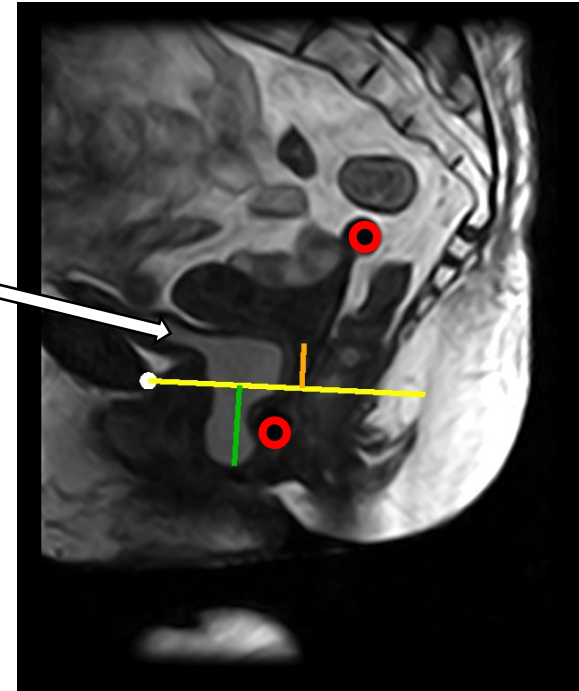
Measurements

Supine



Bladder

Up right



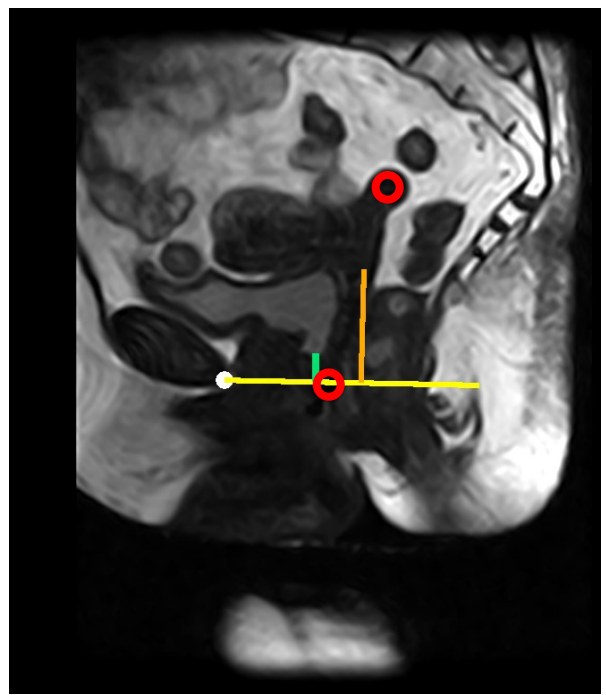
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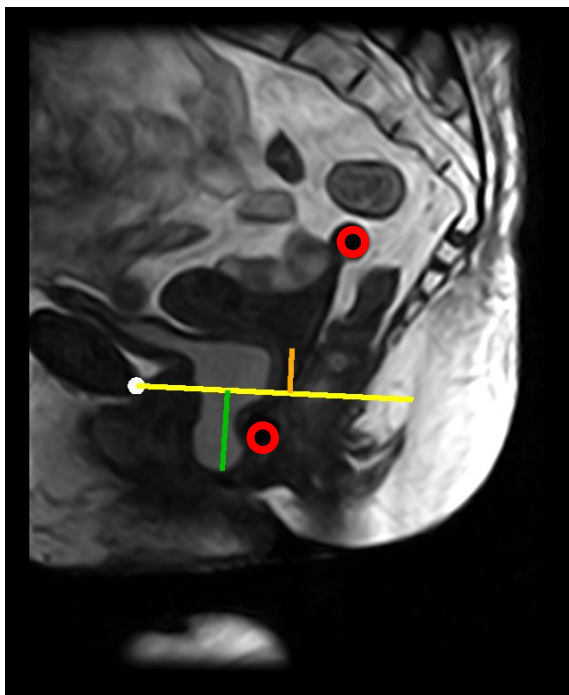
Measurements



Supine



Up right



The visual overlay of the distances on a user-selected MRI sagittal slice

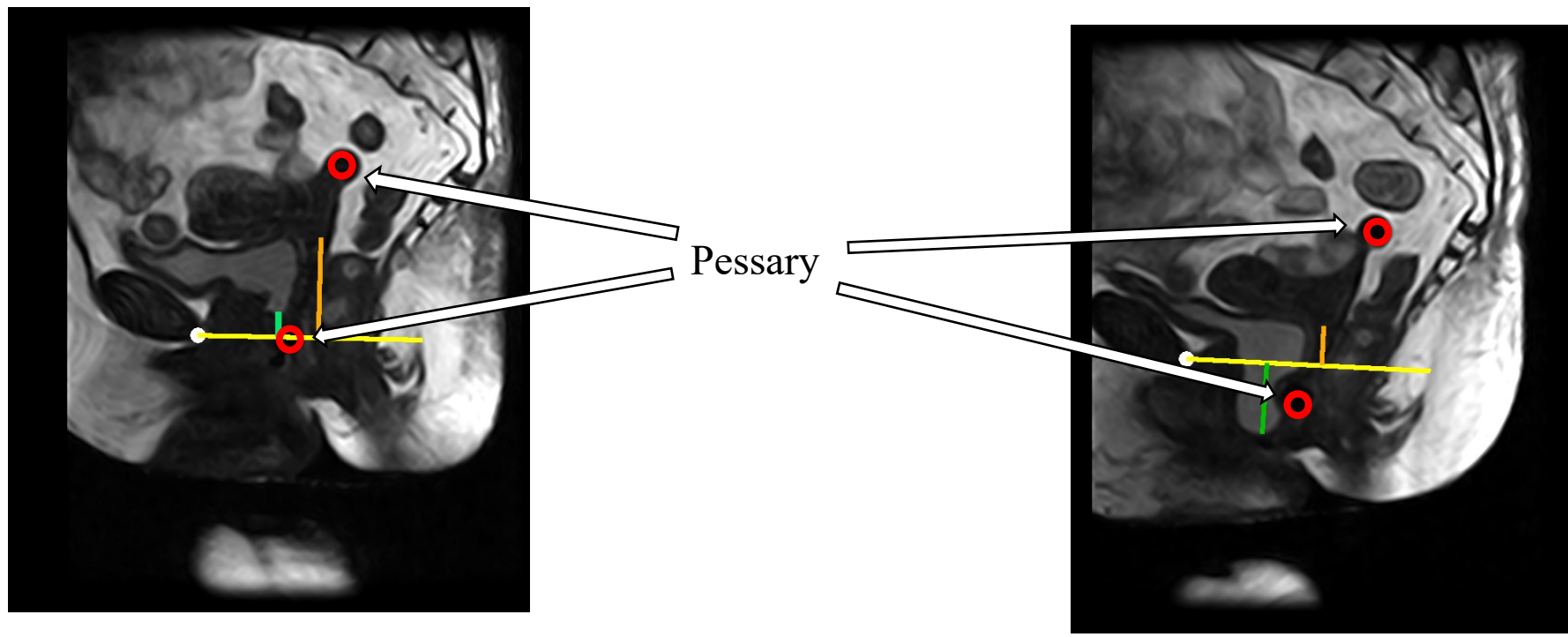


Measurements



Supine

Up right



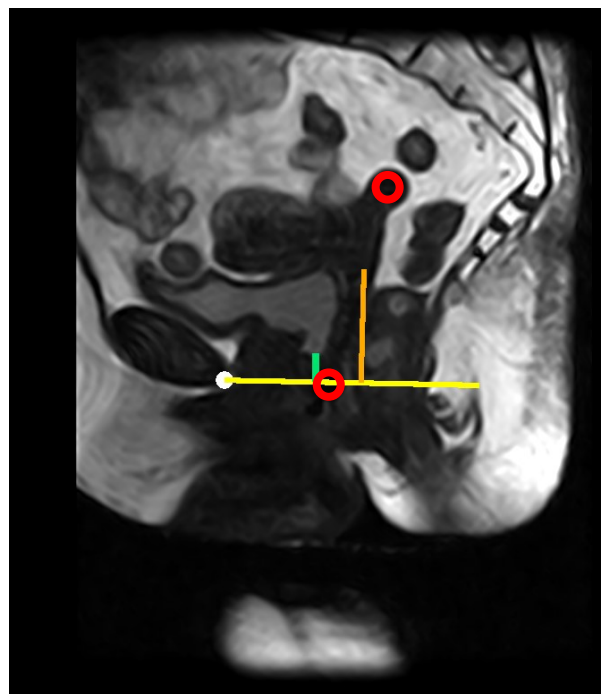
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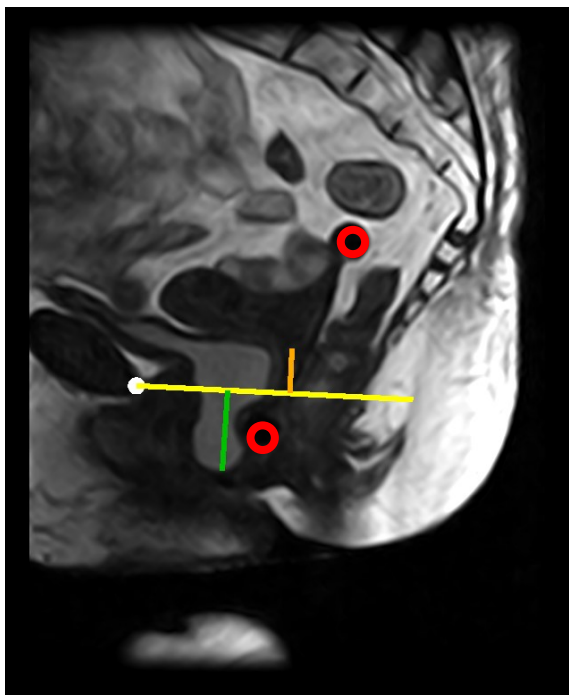
Measurements



Supine



Up right



The visual overlay of the distances on a user-selected MRI sagittal slice



Conclusion

- There is a significant difference in the position of the organ and pessary from supine to upright position.
- Even with patients who have successful pessary fitting, showed highest prolapse from supine to upright position

Future research:

Assessment of the pelvic floor of different patient populations.

Understand the interaction of the pessary with the pelvic floor to increase the successful pessary fitting.

Team

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- Anique Bellos-Grob
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- Angelique Veenstra
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- Karin Dekker
- Marijke van Heeswijk





Thanks for your
attention

Questions?

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