

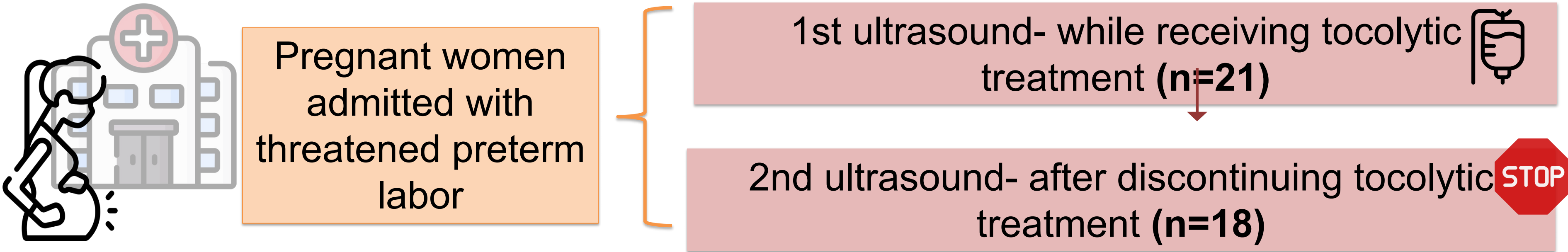
Dynamic cervicoisthmic ultrasound in threatened preterm labor during and after atosiban treatment

Sara Catalán, Danique Bruil, Alba Casellas, Teresa Higuera, Itziar García Ruiz, Maria M Goya, Nerea Maiz, Alba Farras. Materno-fetal medicine Unit, Vall d’Hebron Barcelona Hospital Campus

Introduction

The **cervico-isthmic complex** extends beyond cervical length, with dynamic imaging changes during pregnancy. Their high frequency suggests a physiological role, but their clinical significance remains unclear.

Materials and methods



Each examination included **two acquisition** performed about 20 minutes apart after voiding.

Preliminary results

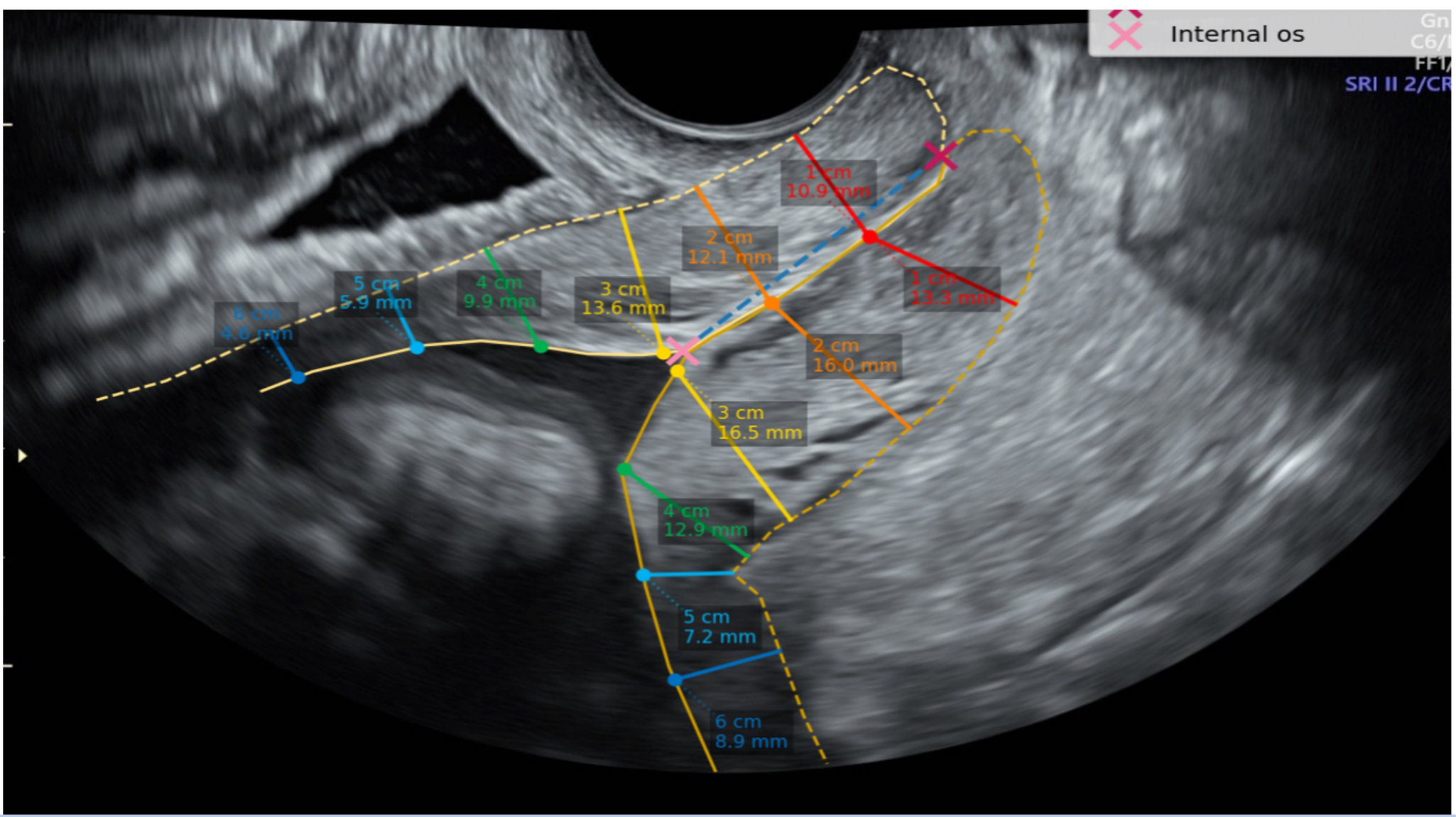
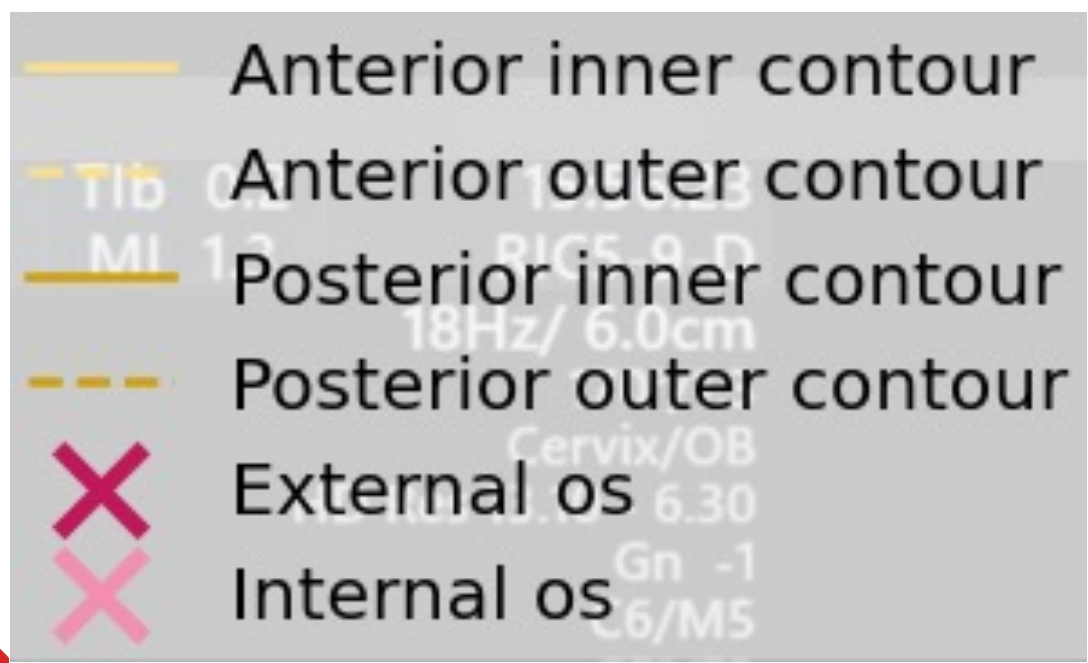
- The **isthmus** in the second acquisition was thinner than in the first supporting a **short-term post-void dynamic effect**.
- During atosiban, anterior isthmus thickness was lower than post-atosiban at 5 cm and 6 cm.
- Cervical length** predicted longer latency to delivery both during and post-atosiban.
- Anterior and posterior isthmus thickness** at 3 cm during atosiban was lower in women delivering <34 weeks.
- No parameter predicted delivery <37 weeks

Conclusion

Cervicoisthmic ultrasound reveals a dynamic, region-specific lower uterine segment phenotype modulated by atosiban. Cervical length was the most consistent predictor of latency, while regional thickness may identify risk of early preterm birth (<34 weeks).

Objectives

- Assess short-term changes in cervicoisthmic thickness
- Compare scans during and post-atosiban
- Test whether these measurements predict latency to delivery and preterm birth .



Cervical length and anterior/posterior cervicoisthmic thickness were measured, assessing repeatability, scan changes, and associations with delivery latency.

