

EP16.172 Impact of preoperative transvaginal ultrasound–detected membrane prolapse on outcomes after emergency cervical cerclage.

Jun Kubonoya, Tatsuya Arakaki, Yuki Mukai, Hiroko Takita, Yuka Yamashita, Mayumi Kaneko, Ryu Matsuoka, Akihiko Sekizawa
Department of Obstetrics and Gynecology, Showa Medical University School of Medicine, Tokyo, Japan

Background

Although emergency cervical cerclage can prolong pregnancy in women with cervical insufficiency, outcomes vary considerably, particularly in cases with membrane prolapse.

Objectives

To evaluate the impact of preoperative transvaginal ultrasound–detected membrane prolapse on pregnancy prolongation after emergency cervical cerclage.

Methods

Study design:

- Retrospective single-center study (2018–2025).
- 52 patients who underwent emergency cervical cerclage for cervical insufficiency and delivered at ≥ 22 weeks of gestation.

Definition of membrane prolapse:

Fetal membranes extending beyond the external cervical os on preoperative transvaginal ultrasound.

Groups:

Prolapsed group (n=17) vs. non-prolapsed group (n=35).

Primary outcome:

Pregnancy prolongation from cerclage to delivery.

Statistical analysis: Kaplan–Meier analysis of pregnancy continuation and landmark analysis at 28 days after cerclage.

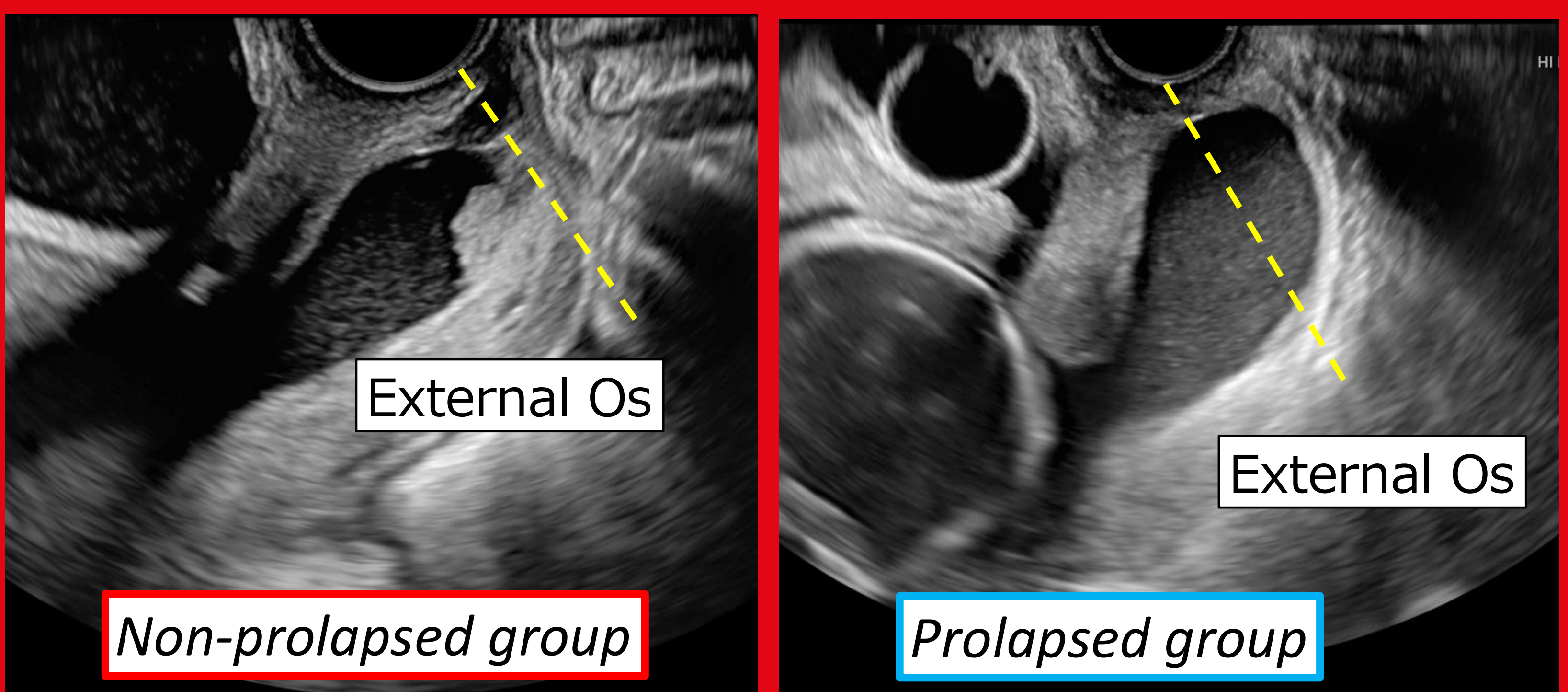
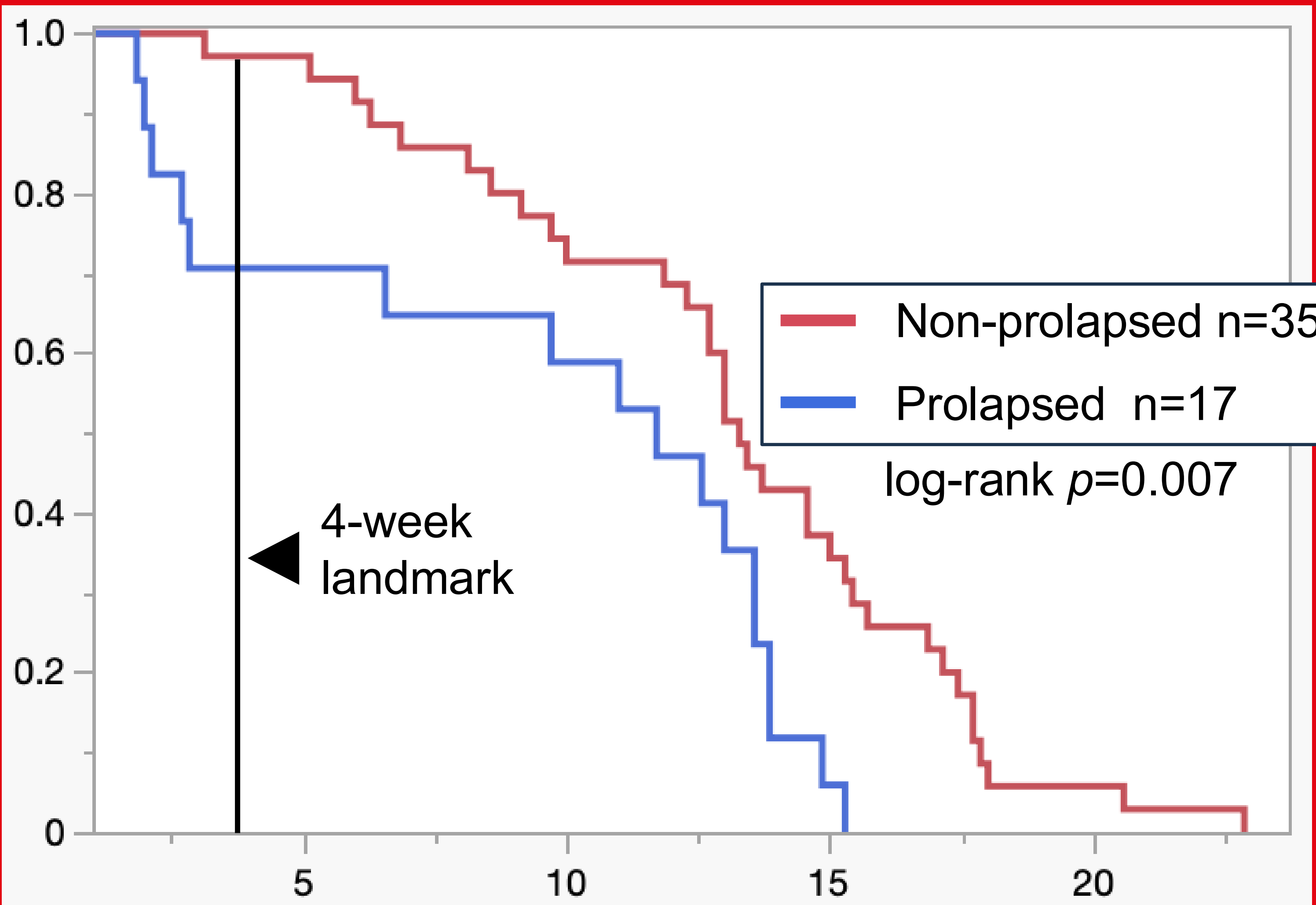


Figure 1. Preoperative transvaginal ultrasound images.



Overall postoperative period.

Figure 2. Comparison of pregnancy continuation rates after emergency cerclage

Results

1. Baseline characteristics were comparable between the groups, including maternal age, parity, history of preterm birth, and previous cervical conization. Shirodkar cerclage was performed in approximately 26% of all cases and was significantly more frequent in the non-prolapsed group.
2. Pregnancy prolongation was shorter in the prolapsed group (82 vs. 93 days, $p<0.05$).
3. Gestational age at delivery was earlier in the prolapsed group (37 vs. 38 weeks, $p<0.05$).
4. Overall pregnancy continuation was significantly lower in the prolapsed group.
5. Delivery within 4 weeks after cerclage was more frequent in the prolapsed group (29.4% vs. 2.9%, $p<0.05$), whereas no significant difference was observed beyond the 4-week landmark.

Conclusion

Preoperative transvaginal ultrasound provides useful risk stratification before emergency cervical cerclage. The increased risk associated with membrane prolapse is concentrated in the first 4 postoperative weeks.