Labor induction with misoprostol (Cytotec) versus dinoprostone (Propess)

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Objective. To compare and assess the efficacy and the safety of both oral and local prostaglandins for induction of labour (IOL).

Materials and Methods. This was a single-centre prospective cohort study, conducted at San Filippo Neri Hospital. Data were collected through a clinical panel we developed. 164 women at term were recruited between November 2021 and August 2022; 93 of them underwent IOL through either oral or local prostaglandins alone. 73 women received oral prostaglandins (misoprostol). 20 received vaginal prostaglandins (dinoprostone). Bishop score was unfavourable in both groups (< 4). The primary outcome measured was caesarean deliveries. Secondary outcomes were time from induction to vaginal delivery and measures of maternal and neonatal safety.

Results. Oral and local prostaglandins showed similar efficacy and safety. The overall cesarean section rate was 19% for the first group and 25% for the second. Mean time from induction to vaginal delivery was 15 h for both groups. Maternal complications were detected in 4 patients of the first group: 2 PPH, 2 retained placenta. No fetal complications occurred during our study: Apgar score was > 7 in all newborns and intensive care treatment was never required. The major indication for caesarean section following IOL was non-reassuring CTG.

Conclusions. Overall, both oral and local prostaglandins proved to be safe IOL, and their efficacy can be considered comparable. Even though no statistical significance can be assessed, caesarean section rate was lower in those patients treated with oral prostaglandins.