

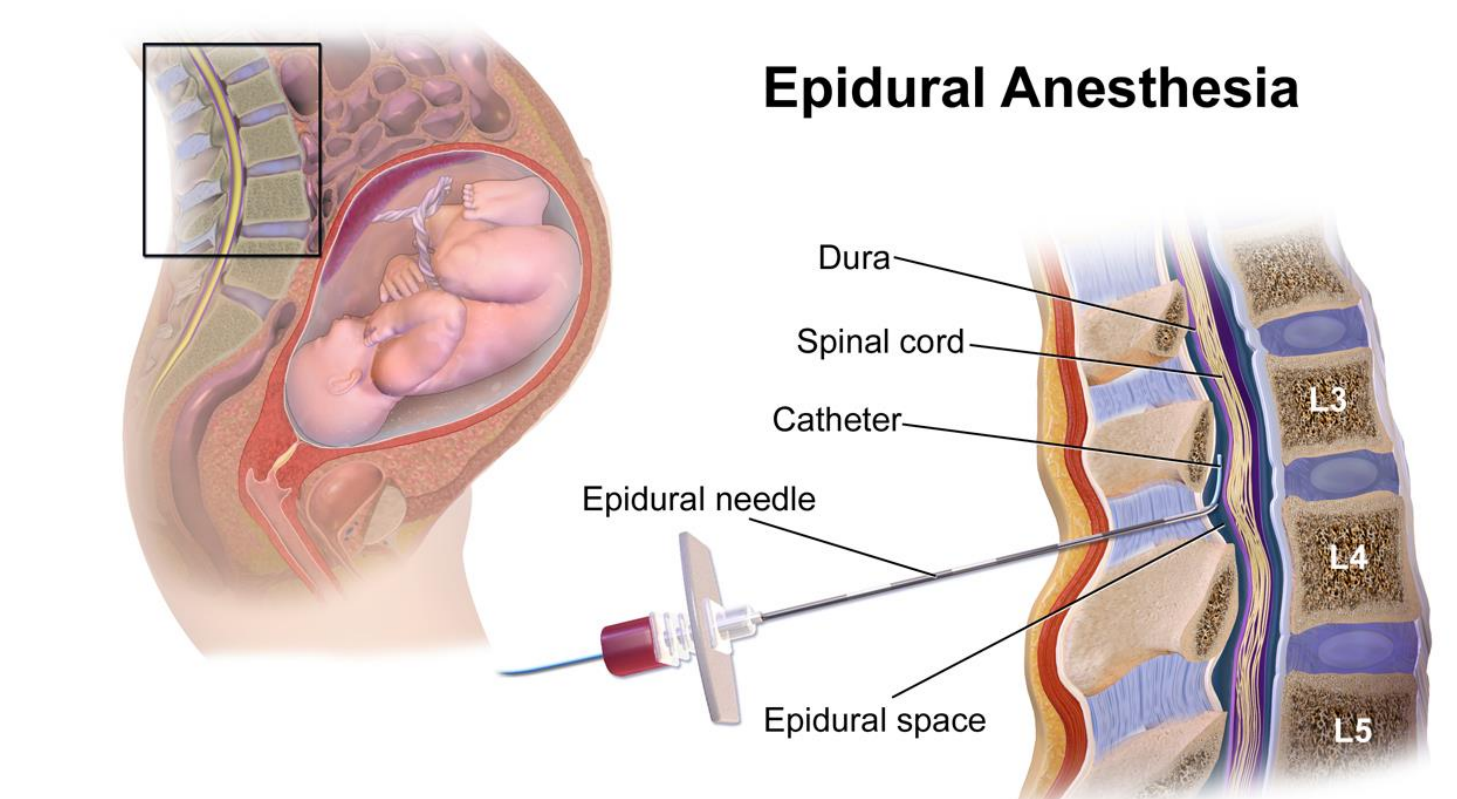
# SHORT-TERM EFFECTS OF THE USE OF ANALGESIA DURING VAGINAL BIRTH ON THE PELVIC FLOOR: PROSPECTIVE COHORT

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## Hypothesis / aims of study

- Pregnancy and vaginal birth, multiparity, prolonged or obstructive labor and history of stress urinary incontinence (SUI), during pregnancy, are recognized risk factors for a woman becoming incontinent after childbirth [2].
- These factors are deeply researched and discussed in the international literature. One of these factors that can contribute to prolong labor and delivery is the use of analgesia, which has not yet been investigated so deeply.
- Due to the impacts that labor analgesia may have on the female pelvic floor, and to the inconsistency on the subject in the literature, it is necessary to investigate its real impact.
- Thus, the objective was to verify the existence of an association between the use of analgesia during vaginal birth and the prevalence of complaints of urinary and/or fecal incontinence within three months after birth.

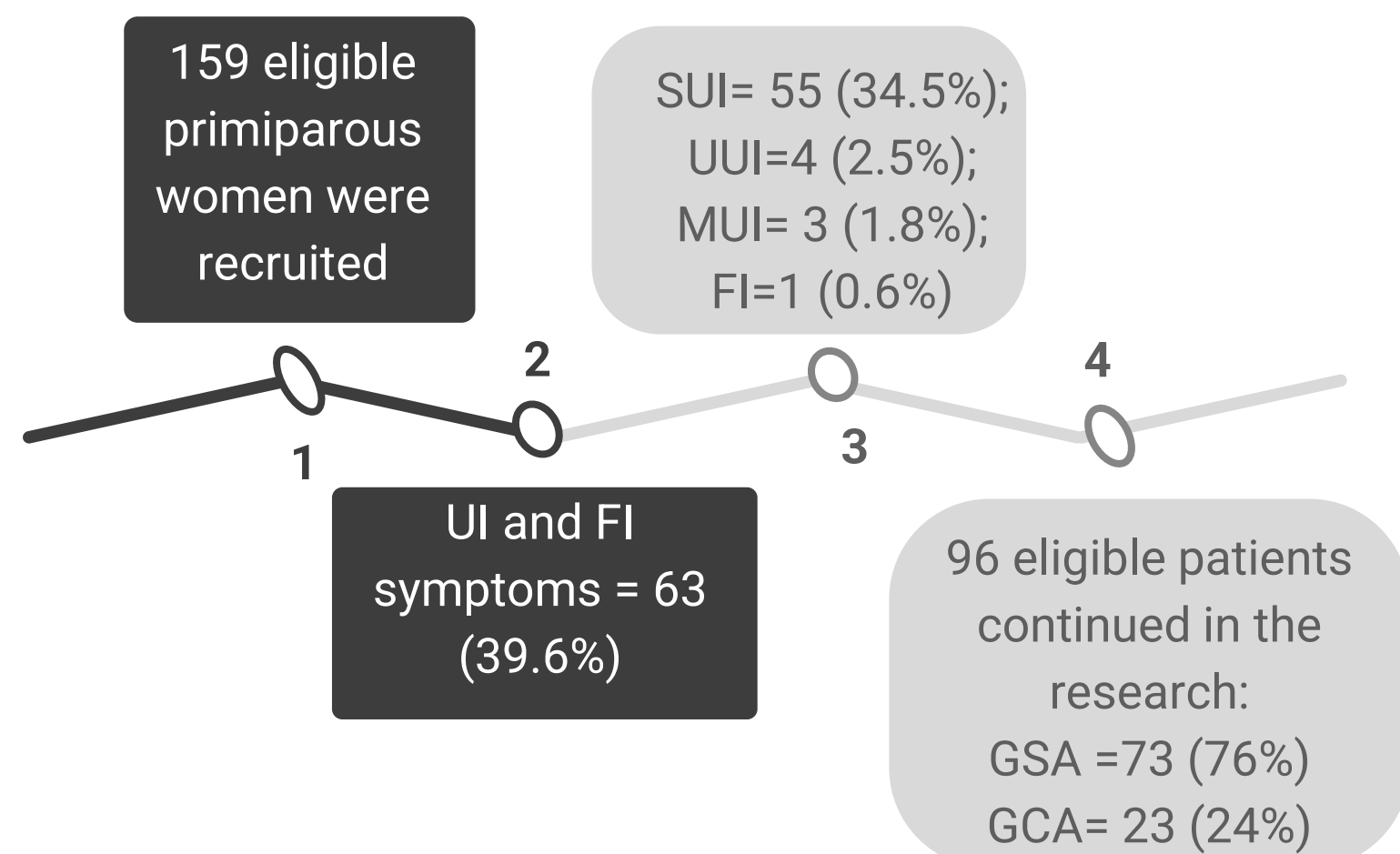


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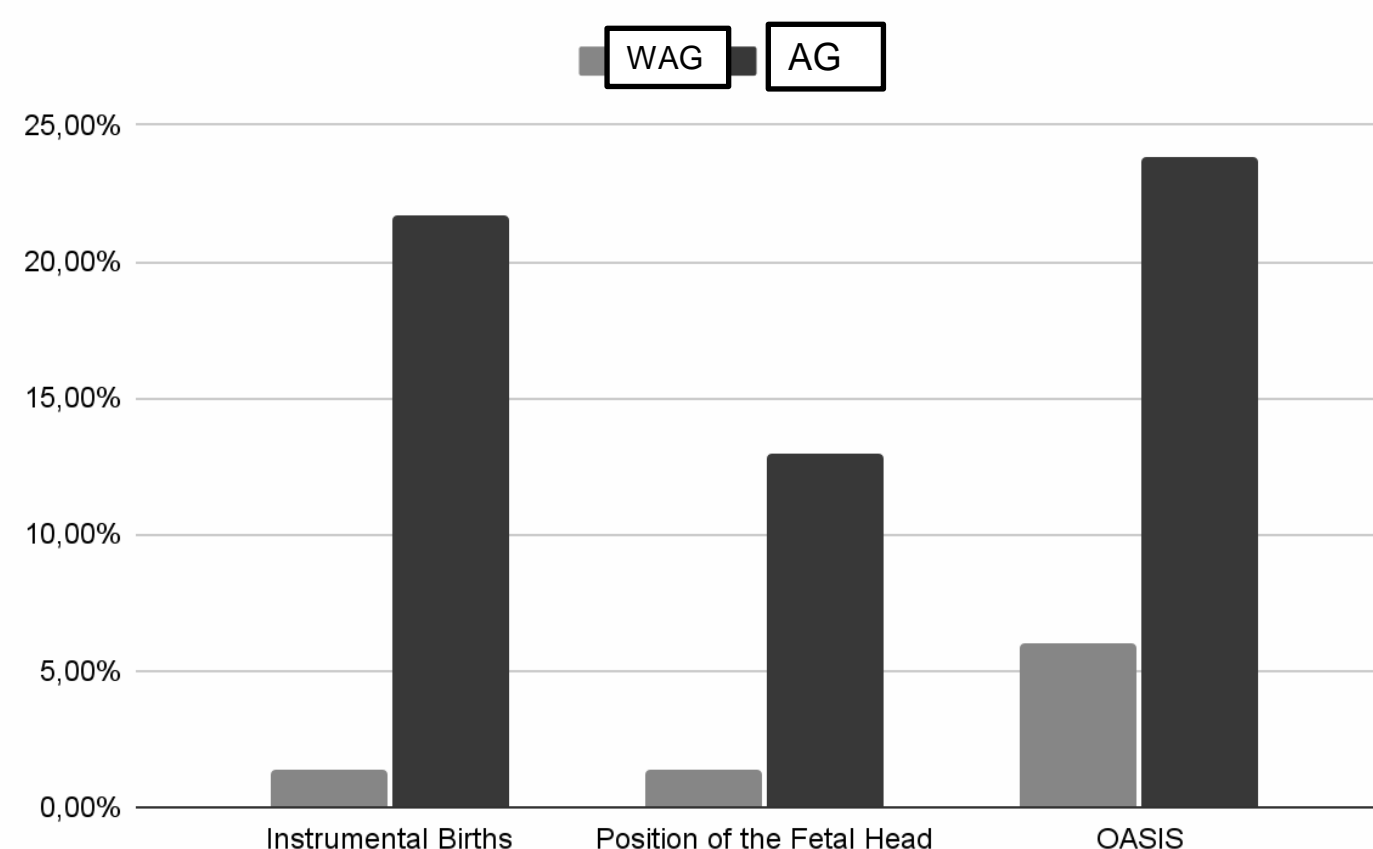
## Study design, materials and methods

- These are the preliminary results (3 months) of a prospective cohort, prepared according to the STROBE initiative guideline.
- The study was carried out in the shared accommodation of a public maternity hospital, in which
  - primiparous women;
  - with full-term vaginal birth in cephalic presentation
  - and over 18 years old were included in the sample.
- Those who complained urinary or fecal antepartum incontinence were excluded.
- **The sample size calculation:** 50 exposed women (Analgesia Group, AG) and 150 women not exposed to analgesia (Without Analgesia Group, WAG).
- Patient recruitment took place between March 2022 and February 2023, during which the following instruments were applied:
  - **Colorectal Anal Distress Inventory (CRADI-8) and Urinary Distress Inventory (UDI-6)** [subscales of Pelvic Floor Distress Inventory - PFDI-20];
  - Other data were collected, such as sociodemographic, gynecological, obstetric and neonatal data;
  - In order to investigate the impact of UI and FI symptoms on quality of life (QoL), during the postpartum period, were used **Urinary Impact Questionnaire (UIQ-7) and the Colorectal Anal Impact Questionnaire (CRAIQ-7)** [subscales of the Pelvic Floor Impact Questionnaire - PFIQ-7].
  - Patient's medical records and contact details for follow-up in three months after birth.
- Data were tabulated in Microsoft Excel and analyzed using SPSS v20.0.

## Results and interpretation



- Sociodemographic, gynecological and obstetric data were homogeneous in both groups;
- The sample was mostly composed of young women (Md=23.47±4.95), with partnership (n=83/86.5%), literate (Md=11.55±1.72), who did not perform any physical activity (n=56/59.6%), with low monthly family income (Md=1792.14±925.53) and with self-reported brown color (n=71/74%).
- The AG showed higher percentages of instrumental births (p<0.05), with variations in the position of the fetal head, in the detachment of the cephalic pole of the posterior and transverse types (p = 0.027) and prolonged duration of the second stage of labor (p = 0.001). Furthermore, when together, third and fourth degree lacerations occurred in a greater proportion in the GA (p = 0.032).



During this period, it was observed that there was no difference in the intergroup assessment UI and AI incidence (p = 0.491 and p = 1.00);

SUI (n=9/12.7%) and loss of flatus (n=7/9.9%) were the most prevalent.

Similarly, there was no difference between the UDI-6 and CRADI-8 subscale scores and the impact of PAD symptoms on the quality of life of the follow-up participants was similar in both groups.

## Conclusions

Although the risk factors for PFD in women who gave birth vaginally under analgesia were undeniable (AG > WAG; p<0.05), it was not possible to perceive, in the short term, their effects on the presence of symptoms, as well as their impact on women. A more accurate assessment of its effects on the female pelvic floor, a follow-up must be carried out for more than three months.

## References

[1] ABRAMS, P. et al. Incontinence. 6th ed. Paris: Health Publication; 2017.