Quadratus Lumborum in Cesarean Section Trial (QUALICS)

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INTRODUCTION

- Postoperative pain after Cesarean Section (CS) has significant impact on quality of recovery

- Neuraxial morphine is the standard for post-CS analgesia with potential adverse effects

- Alternatives to neuraxial morphine
  - ✓ TAP
    - ➢ Inferior analgesic effect than neuraxial morphine
  - ✓ **QLB**
    - ➢ Superior to TAP
  - ✓ Is QLB equivalent to neuraxial morphine?

Objective: to evaluate the post-CS analgesic efficacy of QLB, in comparison with both intrathecal morphine (ITM) and ITM associated with QLB

METHODS

- A randomized blinded clinical trial

- 57 term, healthy parturients scheduled to elective CS.

- Three groups:
  - ➢ ITM group ::: spinal morphine with no QLB
  - ➢ QLB group ::: QLB with no ITM
  - ➢ QLB-ITM group ::: both QLB and ITM

- Standard spinal anesthesia:
  - ✓ 0.5% hyperbaric bupivacaine - 12.5 mg
  - ✓ Fentanyl - 20 mcg
  - ✓ Morphine - 80 mcg (ITM and QLB-ITM groups)
  - ✓ Placebo (0.4 ml of 0.9% NaCl) (QLB group)

METHODS

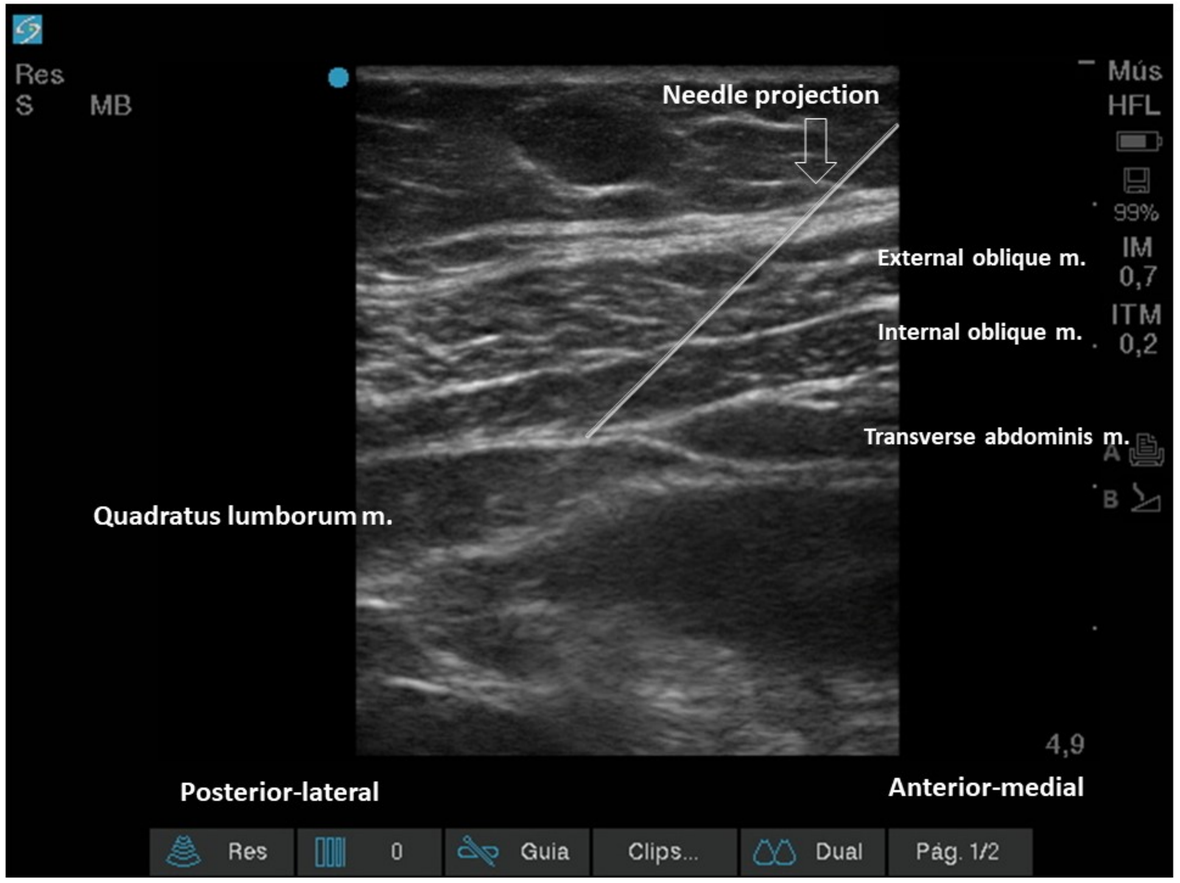
- Primary outcomes:
  - ✓ Pain scores (0-100 at rest and movement) on POD-1
  - ✓ Opioid consumption on POD-1

- Secondary outcomes:
  - ✓ Nausea/vomiting, pruritus, urinary retention and persistent postoperative pain at 3 months

QLB – POSTERIOR APPROACH

- After skin closure and still under residual sensory block
  - ➢ Ultrasound-guided bilateral posterior QLB
    - o Ropivacaine 0.375%, 20 ml in each side
    - o QLB and QLB-ITM groups

  - ➢ ITM group:
    - o Mock ultrasound scanning performed under the surgical drapes



Recruitment N=61	ITM	QLB	QLB-ITM
Inclusion / Exclusion	17 / 0	21 / 2	23 / 2
Assessment POD-1	17	19	21
Assessment 3- month	13	8	15

RESULTS

OUTCOMES	ITM	QLB	QLB-ITM	p-value
Total IV morphine consumption on POD-1 (mg)	3.41 (4.84)	3.10 (2.55)	1.76 (2.96)	0.303
Pain at rest on POD-1 (NVS 0-100)	13.52 (23.43)	18.94 (17.28)	5.71 (14.68)	0.084
Pain at movement on POD-1 (NVS 0-100)	35.29 (30.84)	53.15 (26.04)	41.42 (23.51)	0.131
Urinary retention on POD-1 (%)	**7.02**	**0**	**1.75**	**0.032**

ANOVA (Bonferroni test), Chi-square and Fisher's exact test. Values are mean (SD) and percentage (%)

CONCLUSIONS

- QLB demonstrated no analgesic difference to ITM, and no added benefit when both are associated (QLB-ITM)
- QLB provided the benefit of causing less urinary retention
- QLB can be an alternative when ITM is not administered without compromising postoperative analgesia

REFERENCES

Roofthooft. PROSPECT guideline for elective caesarean section. Anaesthesia 2021;76:665-80