General anaesthesia for c-section – why do we still do it?

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Background:

In **Portugal c-section rate is 32,9%**.¹ Although regional anaesthesia (RA) is the hallmark choice for c-section, general anaesthesia (GA) may be indicated due to emergent/urgent delivery, contraindication for regional technique or inadequate regional block.

The WHO suggests an ideal rate of 5-10% of c-section deliveries for optimal mother and child outcomes.²

Goal of study:

Characterize women that underwent GA for c-section in a tertiary obstetric unit, from **january 2015 to october 2017**.

Material and methods:

Review of clinical data of consecutive women submitted to c-section under GA in the considered time frame. **Retrospective and descriptive analysis** were performed.

Results:

In this period there were 7057 deliveries and the **c-section rate was 26,9%**:

- **12.8% (n=242) underwent general anaesthesia**
 - median age was 32,5 ± 5,9 years
- gestational age was 37 ± 3,7 weeks
 - 75% were ASA II and 23% were ASA III

Graphic 1 – Classification of urgency (n=242)

Graphic 2 – Indications for c-section (n=242)

Table 1 – Indications for general anaesthesia (n=242)

Contraindication to regional anaesthesia (38%)	Obstetric emergency or urgency (29%)	Failure of regional anaesthesia (17%)	Maternal refusal for RA (7%)	Unknown reason (9%)
Coagulation disorders 42%	Foetal heart decelerations 40%	Epidural 55%	–	–
Active infection 16%	Placental abruption 17%	Spinal 45%		
Lumbar spine pathology 11%	Pre-eclampsia/HEELP 15%			
Other chronic diseases 11%	Prolapsed cord 6%			

- 100% general balanced anaesthesia with rapid sequence induction:

 - **thiopental** 75% and propofol 25%
 - **suxamethonium** 87% and rocuronium 13%
 - **sevoflurane** 100%
- Intraoperative complications:

 - **hypertension** (7,9%)
 - hypotension (3,3%)
 - dysrhythmia (3,3%)
 - 1 airway rescued with a supraglottic device
 - 1 dental injury

Conclusions and discussion:

We observe a high rate of c-section and general anaesthesia. As a referral centre, we have a higher prevalence of maternal disorders and high-risk pregnancies contributing to contra-indicate regional anaesthesia. As a teaching unit for anaesthesia trainees, the prevalence of failed technique is probably inflated.

References:
¹ INE | DGS (2016). Cesarianas nos Hospitais: PORDATA. ² WHO (2015). Statement on Caesarean Section Rates: Human Reproduction Programme and World Health Organization.