

# Riscos e cuidados anestésicos na cesárea na obesidade mórbida

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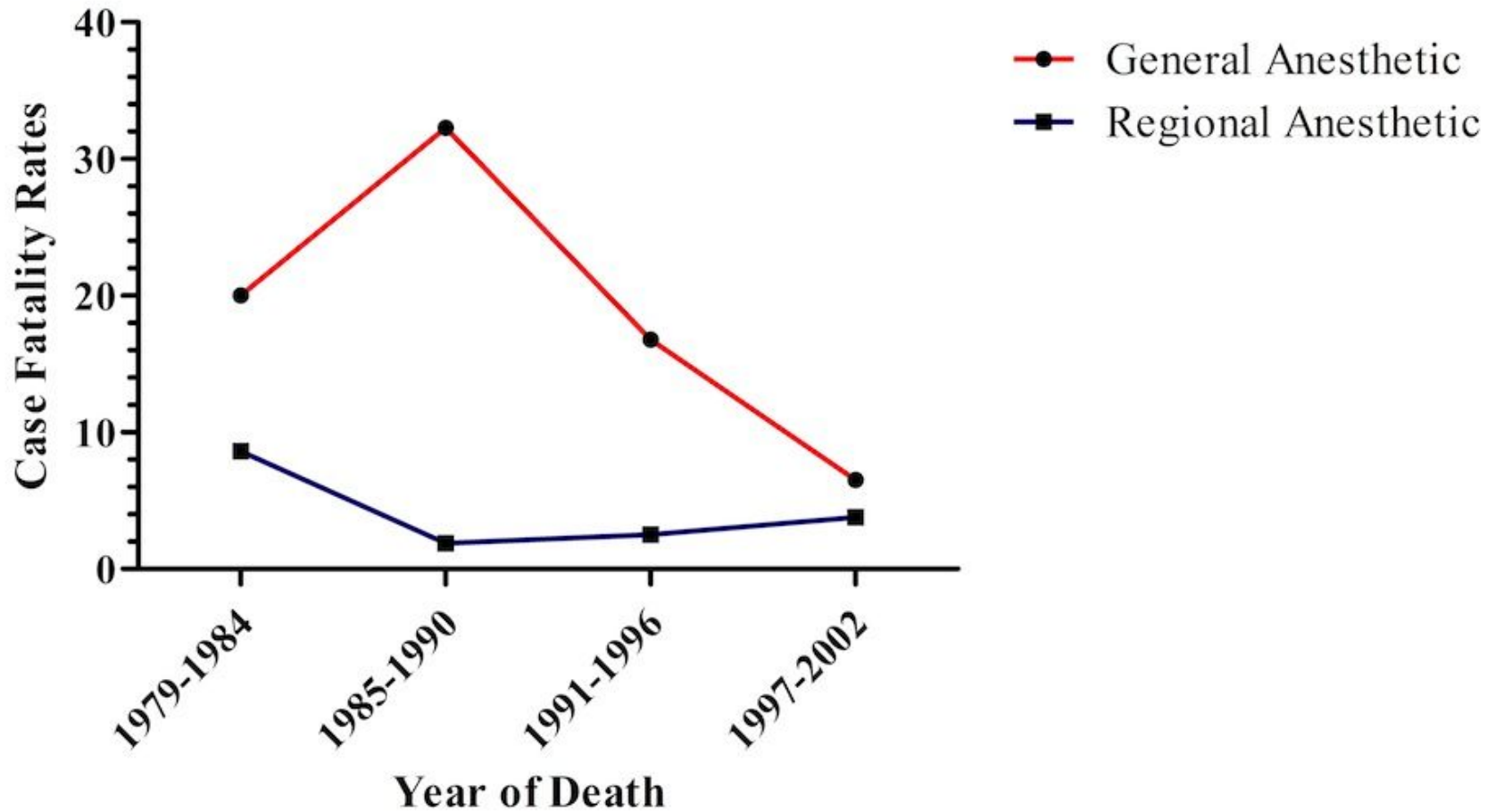


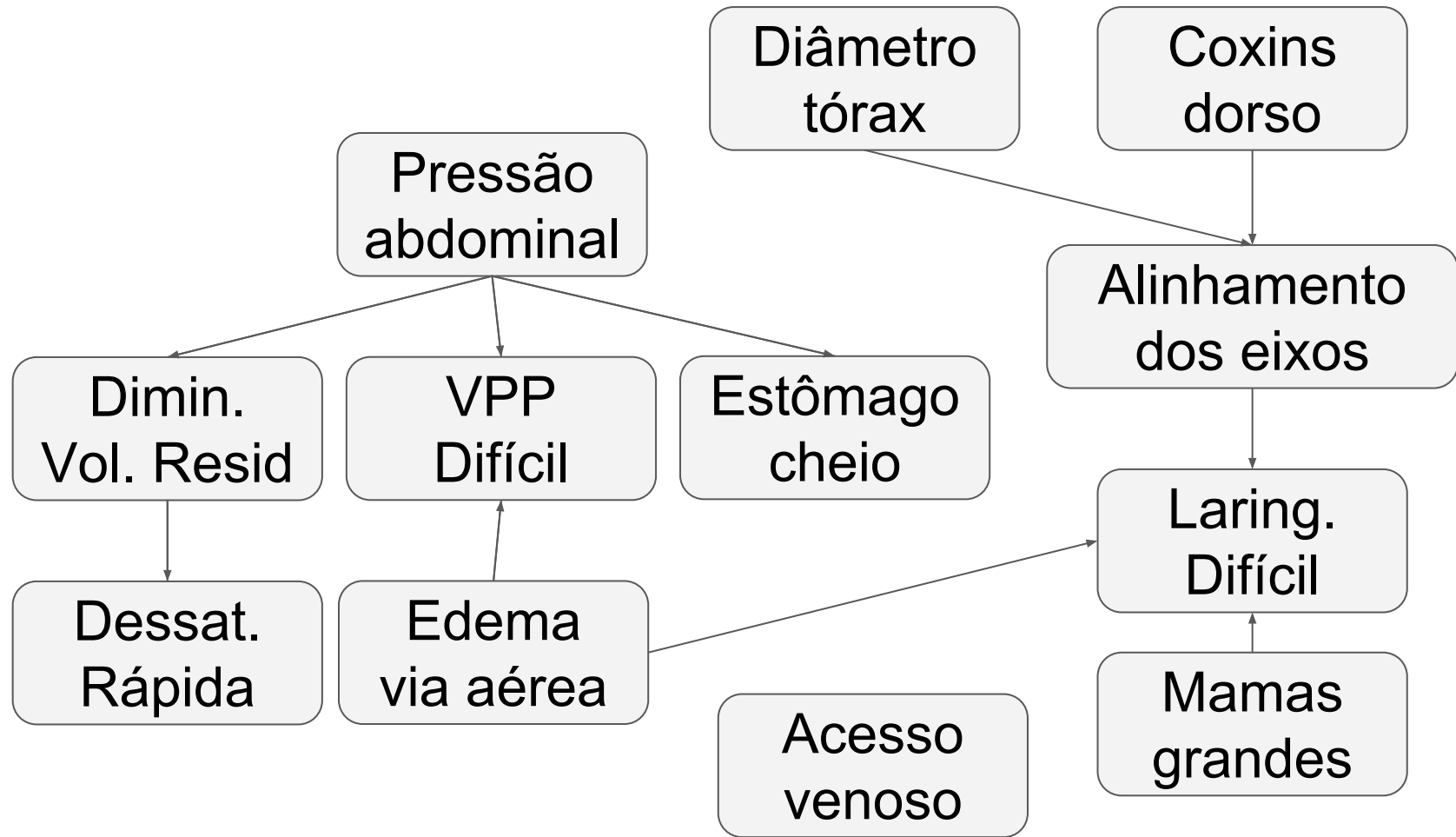
# “Riscos e cuidados anestésicos na cesárea na obesidade mórbida”

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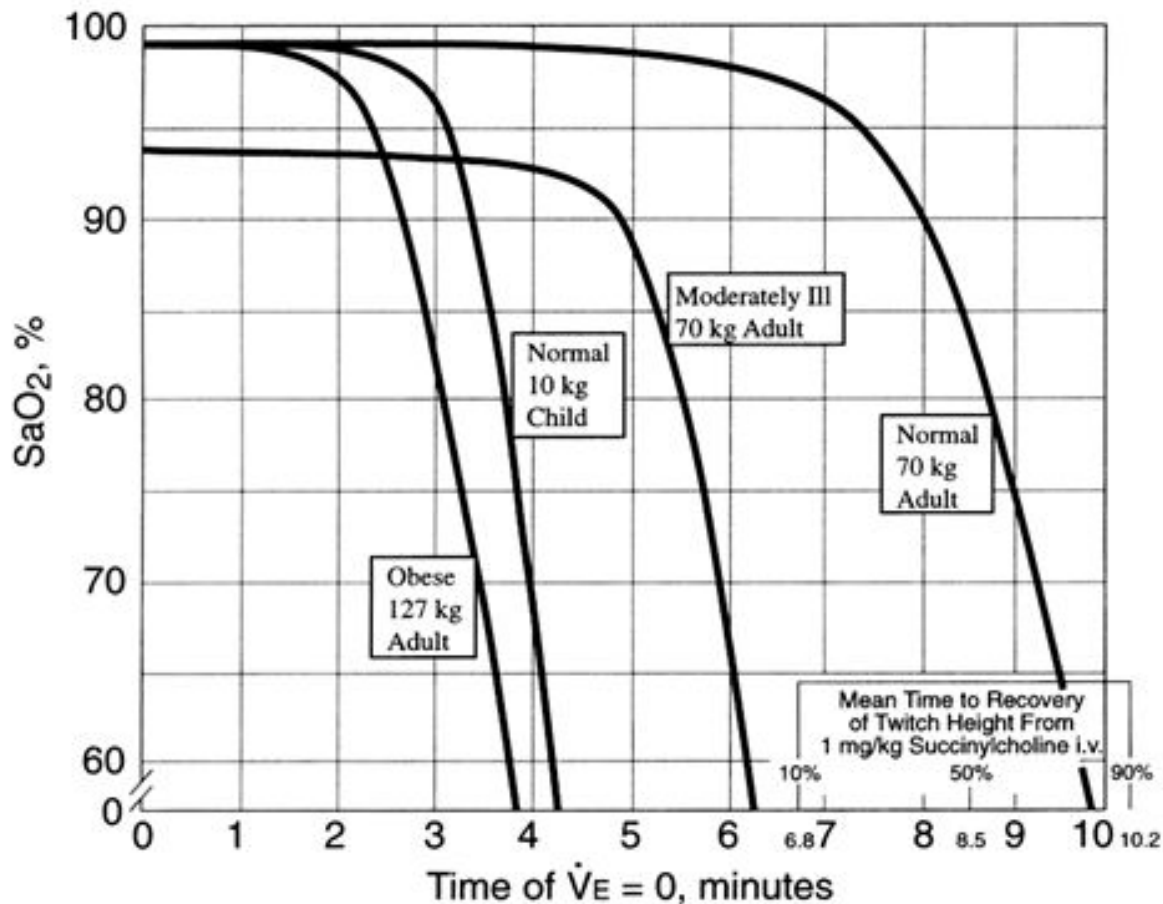
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Autor: Gabriel Magalhães Nunes Guimarães





### TIME TO HEMOGLOBIN DESATURATION WITH INITIAL $F_{A}O_2 = 0.87$

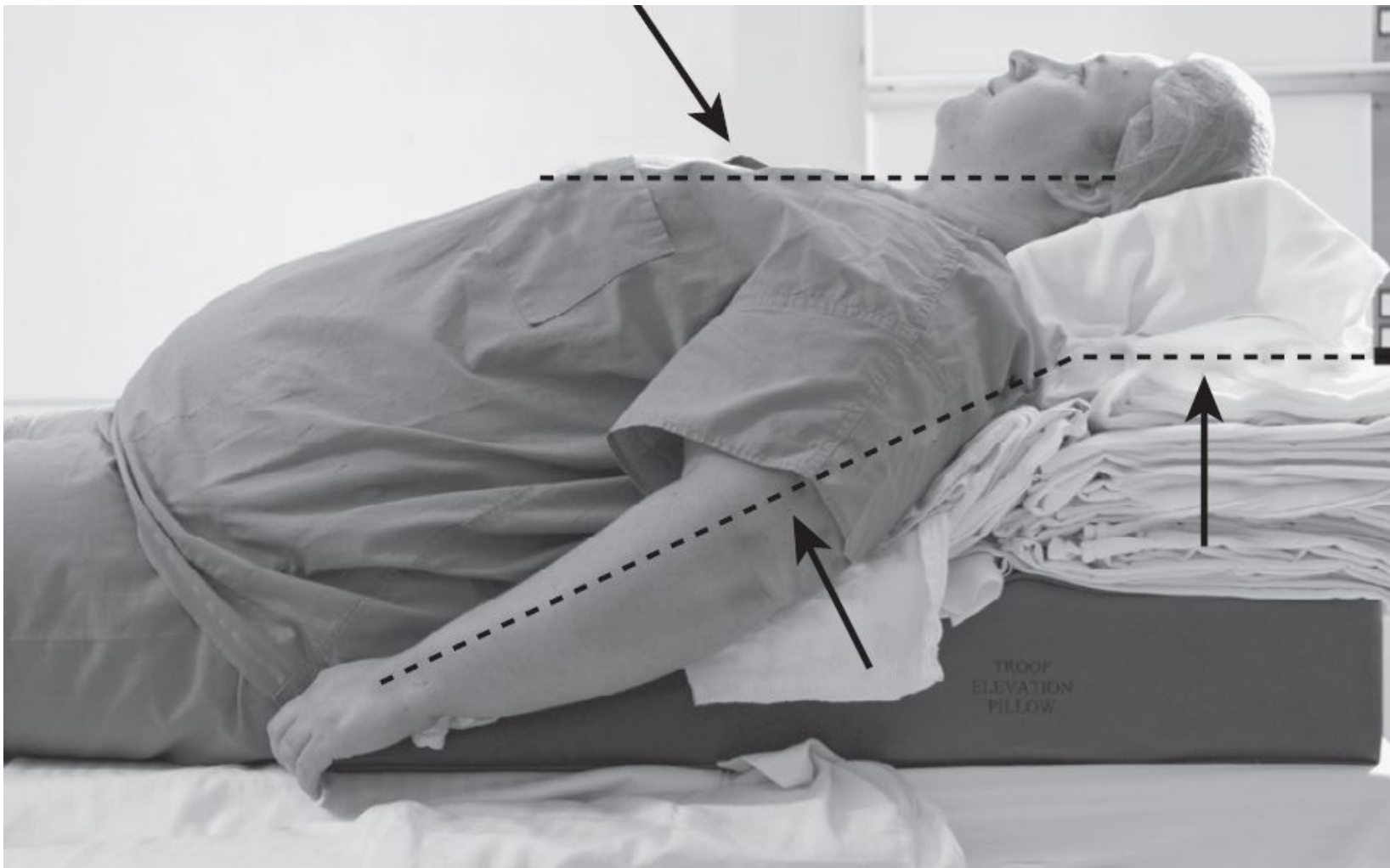


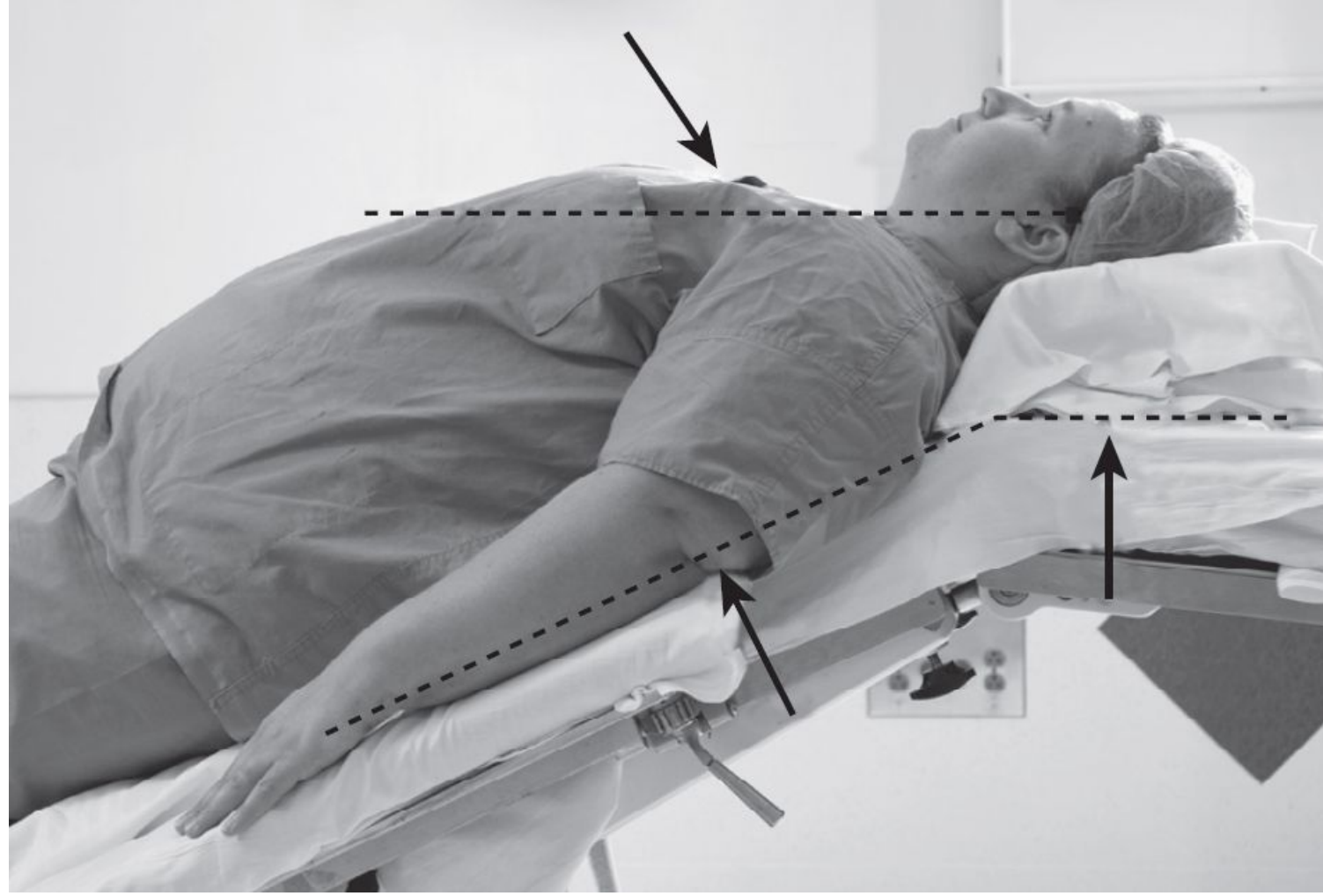
	<b>Pregnancy</b>	<b>Obesity</b>	<b>Combined Effect</b>
Tidal volume	↑	↓	↑
Respiratory rate	↑	↔ or ↑	↑
Minute volume	↑	↓ or ↔	↑
Expiratory reserve volume	↓	↓↓	↓
Residual volume	↓	↓ or ↔	↓
Functional residual capacity	↓↓	↓↓↓	↓↓
Vital capacity	↔	↔	↓
FEV <sub>1</sub>	↔	↓ or ↔	↔
FEV <sub>1</sub> /VC	↔	↔	↔
Total lung capacity	↓	↓↓	↓
Compliance	↔	↓↓	↓
Work of breathing	↑	↑↑	↑
$\dot{V}/\dot{Q}$ mismatch	↑	↑	↑↑
PaO <sub>2</sub>	↓	↓↓	↓
PaCO <sub>2</sub>	↓	↑	↓

**TABLE 50-2 Physiologic Changes in the Cardiovascular System Induced by Pregnancy and Obesity**

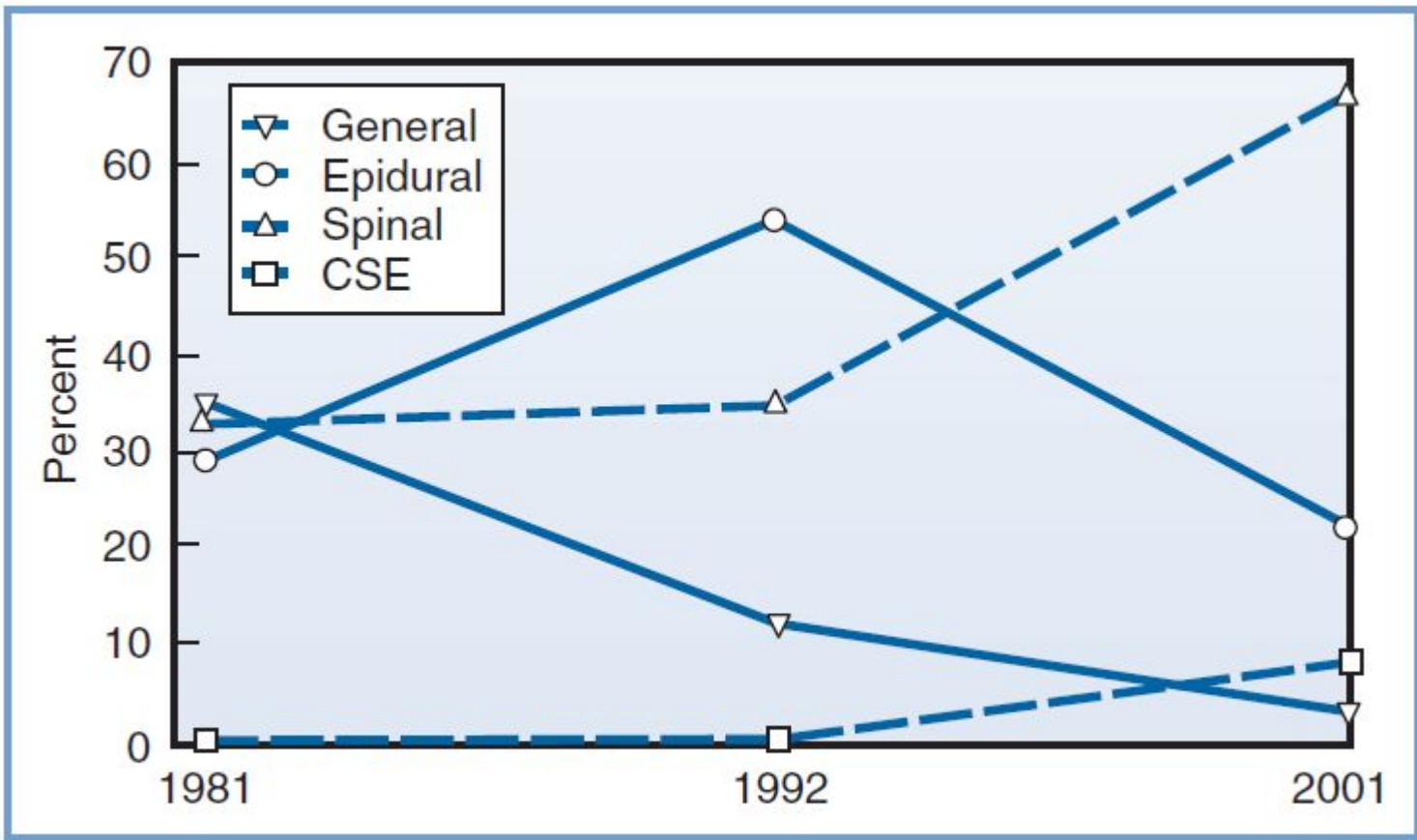
	<b>Pregnancy</b>	<b>Obesity</b>	<b>Combined Effect</b>
Heart rate	↑	↑↑	↑↑
Stroke volume	↑↑	↑	↑
Cardiac output	↑↑	↑	↑↑↑
Blood volume	↑↑	↑	↑
Hematocrit	↓↓	↑	↓
Systemic vascular resistance	↓↓	↑	↔ or ↓
Mean arterial pressure	↓ or ↔	↑↑	↑↑
Systolic function	↔	↔ or ↓	↔ or ↓
Diastolic function	↔	↓	↓
Central venous pressure	↔	↑	↑↑
Pulmonary artery occlusion pressure	↔	↑↑	↑↑

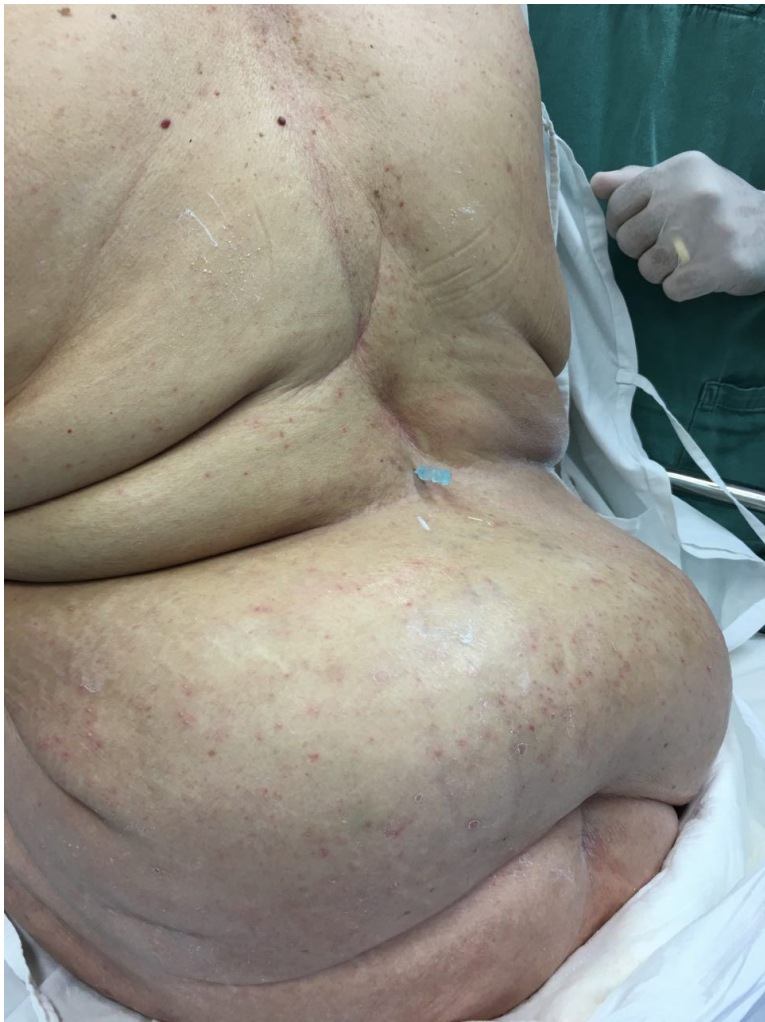






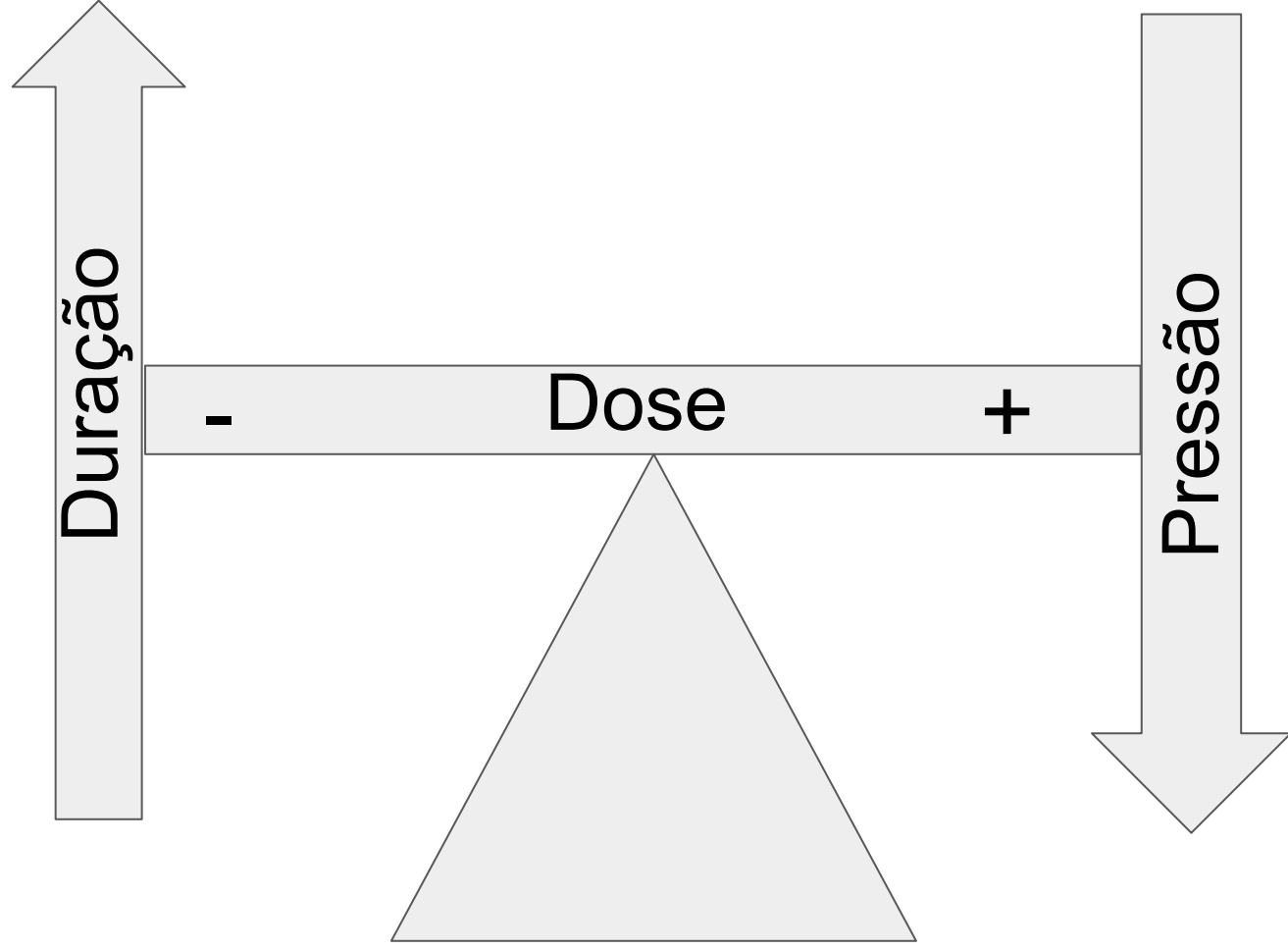
<b>Comorbidity</b>	<b>Relative Risk</b>	<b>95% CI of Relative Risk</b>
Type 2 diabetes*	12.41	9.03, 17.06
Hypertension*	2.42	1.95, 3.67
Coronary artery disease*	3.10	2.81, 3.43
Congestive heart failure*	1.78	1.07, 2.95
Pulmonary embolism*	3.51	2.61, 4.73
Stroke*	1.49	1.27, 1.74
Asthma*	1.78	1.36, 2.32
Gallbladder disease*	2.32	1.17, 4.57
Osteoarthritis*	1.96	1.88, 2.04
Chronic back pain*	2.81	2.27, 3.48
	<b>Odds Ratio</b>	<b>95% CI of Odds Ratio</b>
Depression†	1.55	1.22, 1.98
Gastroesophageal reflux disease‡	1.89	1.70, 2.09





Atenção para:

- Gordura em linha mediana?
- Trombopprofilaxia;
- Plaquetopenia.





# Obesity Supine Death Syndrome: Reports of Two Morbidly Obese Patients

**Kentaro Tsueda, MD,\* Maria Debrand, MD,† Suzanne S. Zeok, MD,‡ Ballard D. Wright, MD,§ and Ward O. Griffin, MD||**

## Case Reports

### Case 1

A 38-year-old man, 175-cm tall and weighing 258-kg, with a life-long history of obesity was admitted because of an increase in dyspnea on exertion and progressive lower extremity edema. At the time of admission, the patient became dyspneic merely walking across a room. The patient slept in a sitting position but denied paroxysmal nocturnal dyspnea or cough. He had been on hydrochlorothiazide for his hypertension.

The blood pressure was 150/90 torr, pulse rate was 96 beats per minute, and respiratory rate was 30 beats per

# Morfina

- Analgesia;
- Risco depressão respiratória obesos..

# **A Systematic Review Evaluating Neuraxial Morphine and Diamorphine-Associated Respiratory Depression After Cesarean Delivery**

Nadir Sharawi, MBBS, FRCA, MSc,\* Brendan Carvalho, MBBCh, FRCA,†  
Ashraf S. Habib, MBBCh, MSc, MHSc, FRCA,‡ Lindsay Blake, MLIS, AHIP,§ Jill M. Mhyre, MD,||  
and Pervez Sultan, MBChB, FRCA, MD (Res)¶

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*Review Article*

# **Obstetric anesthesia for the obese and morbidly obese patient: an ounce of prevention is worth more than a pound of treatment**

MIEKE A. SOENS, DAVID J. BIRNBACH, JAYANTHIE S. RANASINGHE and ANDRÉ VAN ZUNDERT

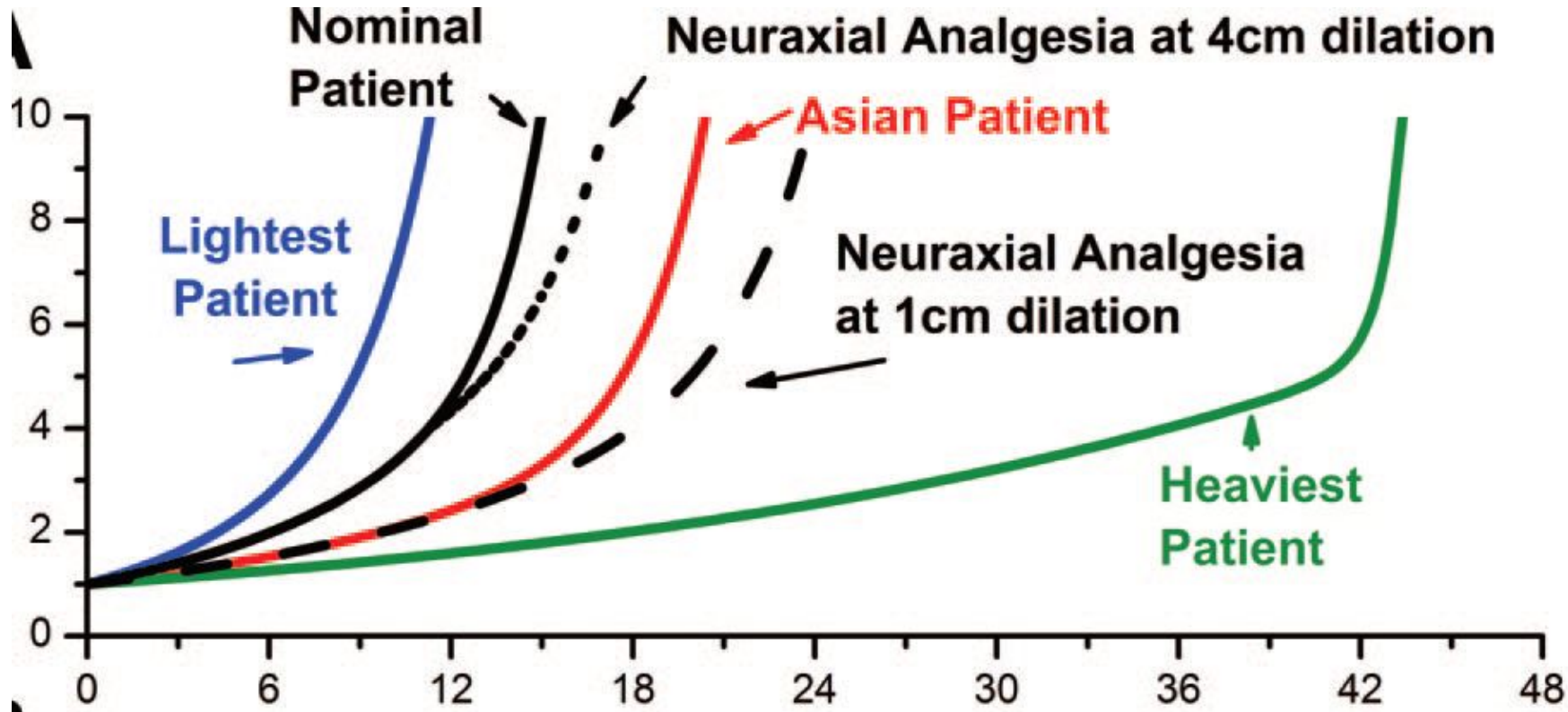
*Department of Anesthesiology, Perioperative Medicine and Pain Management, Jackson Memorial Hospital, Miami, FL 33136, USA*

*Review Article*

**Obstetric anesthesia for the obese and morbidly obese patient: an ounce of prevention is worth more than a pound of treatment**

MIEKE A. SCENS, DAVID J. BIRNBACH, JAYANTHI S. RANASINGHE and ANDRÉ VAN ZUNDELT  
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**Cateter peridural precoce (TP)  
se não houver contraindicações,  
em gestantes obesas.**



■ PAIN MEDICINE

Anesthesiology 2009; 111:1093-110

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*Mathematical Modeling of the Pain and Progress of the First Stage of Nulliparous Labor*

Jozef Debiec, M.D.,\* Jessamyn Conell-Price, B.A.,† Jennifer Evansmith,‡ Steven L. Shafer, M.D.,§ Pamela Flood, M.D.||

# Anestésias sequenciais (CSE, EP)

- Melhor hemodinâmica;
- Controle da duração;
- Permite evitar morfina.

# Ultrasound Guided Neuraxial Anaesthesia

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Edited by

**Dr. Kim Russon and Dr. Ryan Derby**

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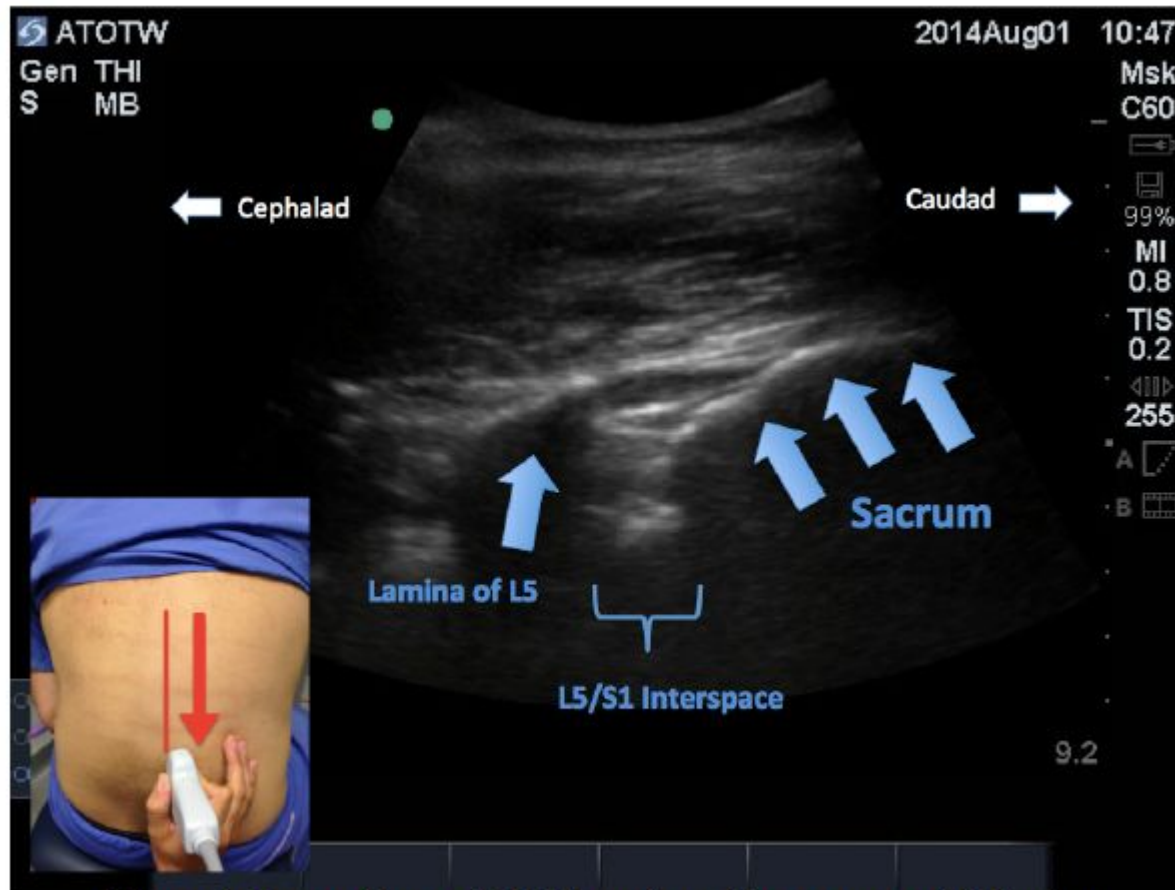
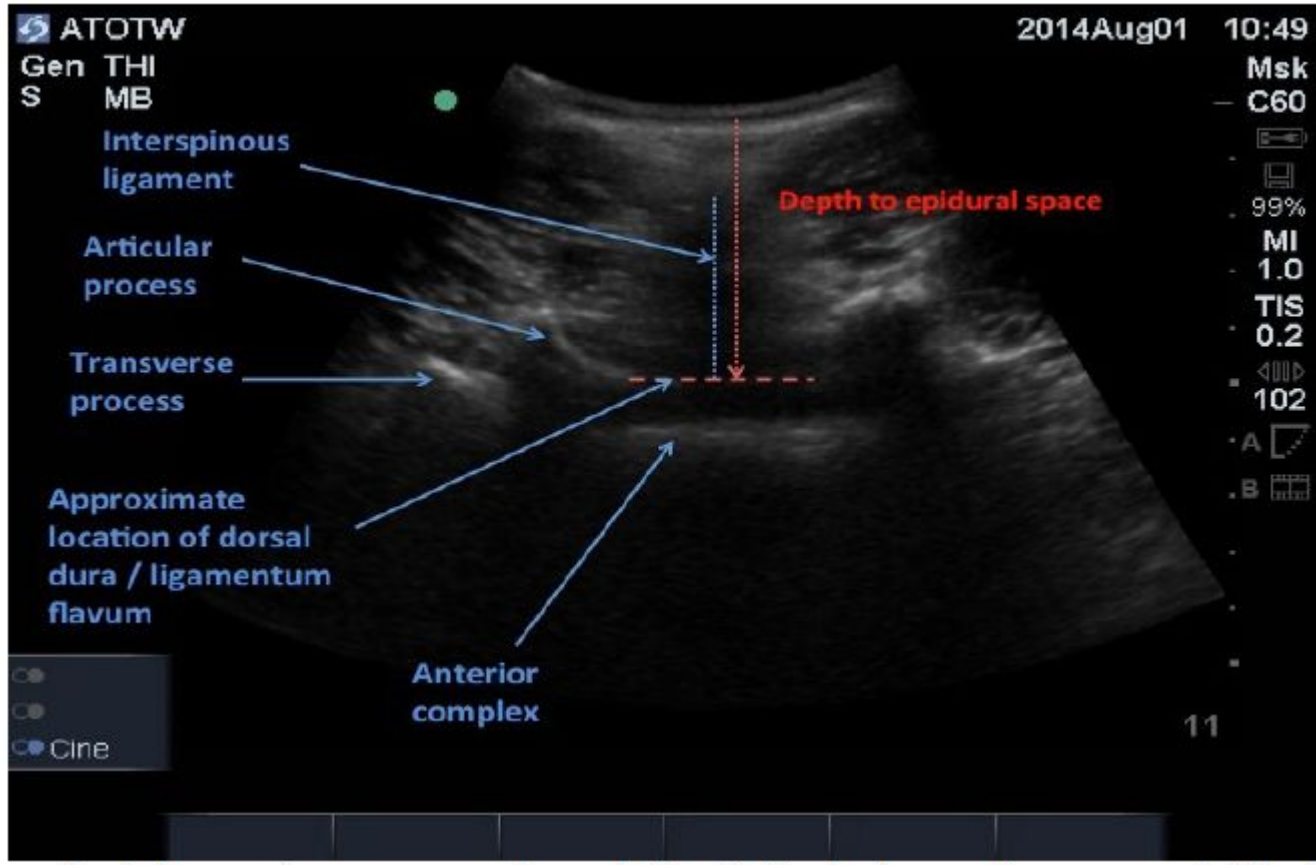


Figure 4: Paramedian sagittal oblique view of the sacrum and L5 lamina.



## Ecografia:

- Encontrar espaço;
- Medir distância;
- Avaliar ângulos.

Sugestão: reservar de acordo com exame físico.

## Sugestões:

- Se risco de cesariana aumentado: ambulatório de avaliação anestésica no terceiro trimestre;
- Cuidado com trombopprofilaxia (evitar se possível);

## Sugestões (paciente internada):

- Avaliação anest. precoce;
- Suspende tromboprolaxia?
- Exame físico / ecografia coluna;
- Considerar cateter peridural precoce (TP);

## Sugestões (cesariana indicada):

- Jejum;
- Ranitidina 50mg + Metoclopramida 10mg + 30ml citrato de sódio 30min antes;
- Cefazolina 3g;

## Sugestões (anestesia):

- Preferir sequencial (neuroaxial contínua);
- Dois anesthesiologistas, um experiente;
- Kit via aérea difícil em sala;

## Sugestões (anestesia):

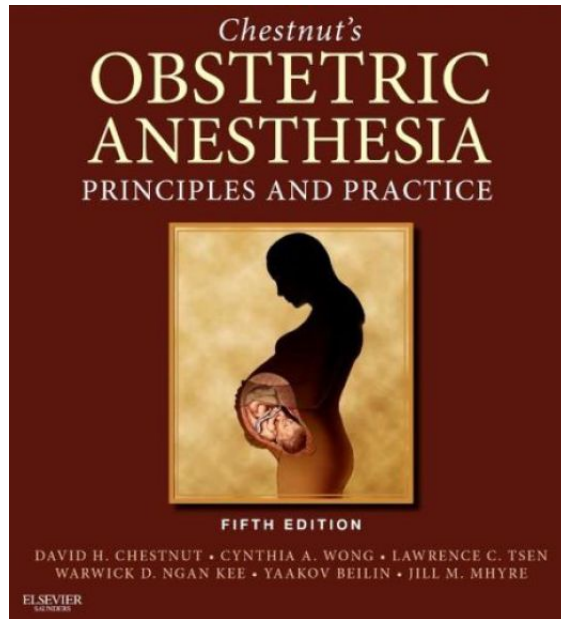
- Posição em rampa;
- Propofol 2mg/kg **peso magro**;
- Succinilcolina 1mg/kg **peso real**;

## Sugestões (anestesia):

- Evitar FiO<sub>2</sub> elevada, recrutamentos alveolares;
- RPA longa / oximetria à noite;

# OBESITY

Ashraf S. Habib, MBBCh, MSc, MHSc, FRCA • Robert D'Angelo, MD



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