SAFETY OF AWAKE CRANIOTOMY FOR PATIENTS WITH OBESITY: A CASE SERIES

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The Ottawa Hospital | L'Hôpital d'Ottawa
Inspired by research. Driven by compassion. Inspiré par la recherche. Guidé par la compassion.

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AWAKE CRANIOTOMY AND OBESITY: SHOULD PATIENTS WITH OBESITY BE EXCLUDED?

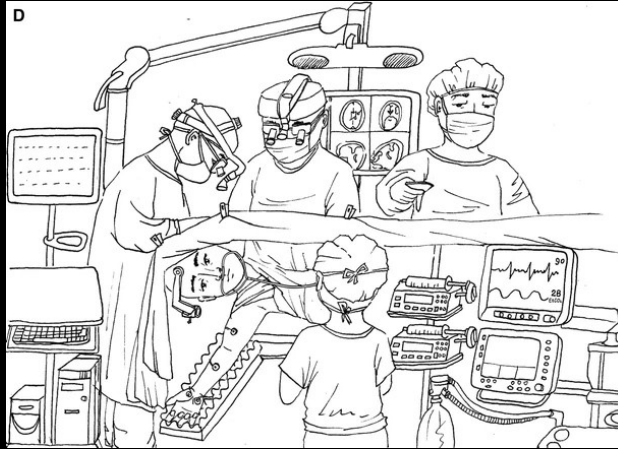Alshabeb A*, Polis T*, Sinclair J**, Catana D**,Budiansky AS*

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Awake Craniotomy

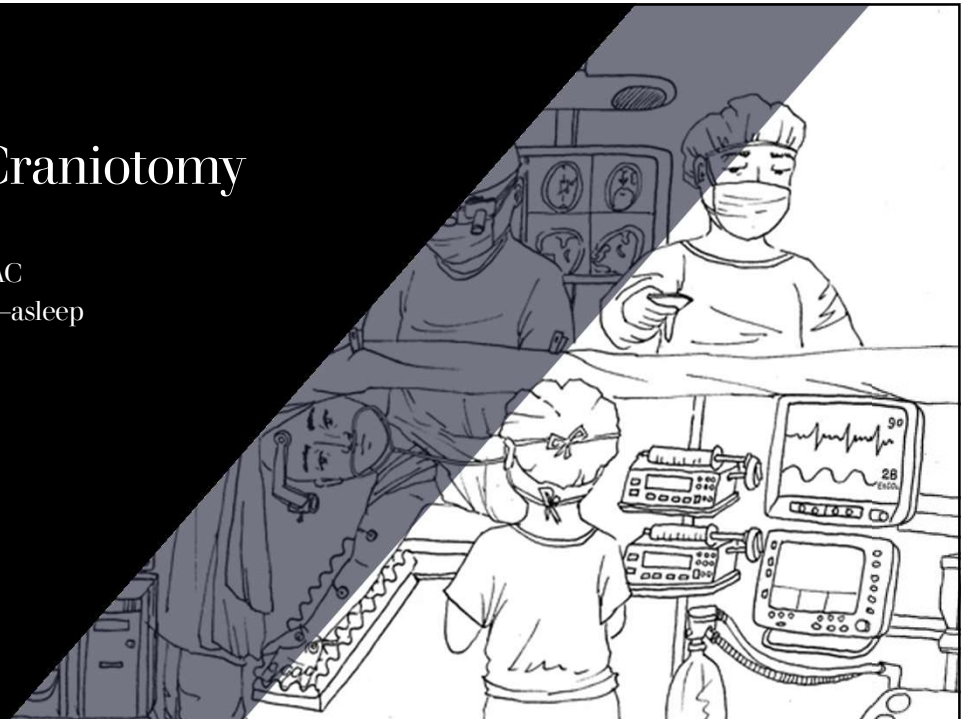
- Verdana Meng, L., McDonagh, D.L., Berger, M.S. et al. Anesthesia for awake craniotomy: a how-to guide for the occasional practitioner. Can J Anesth/J Can Anesth 64, 517–529 (2017). https://doi.org/10.1007/s12630-017-0840-1
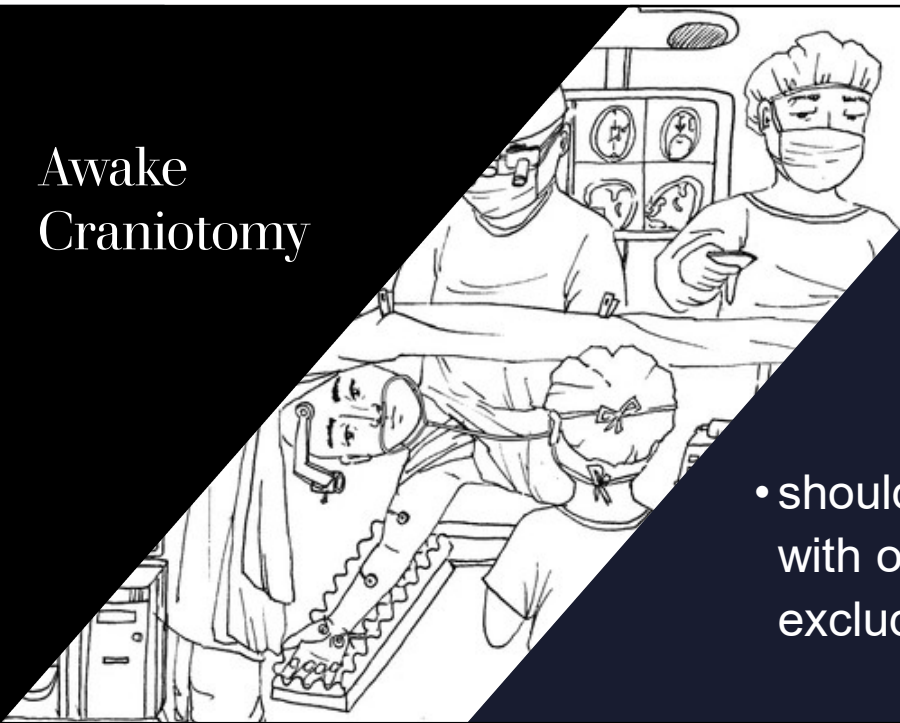
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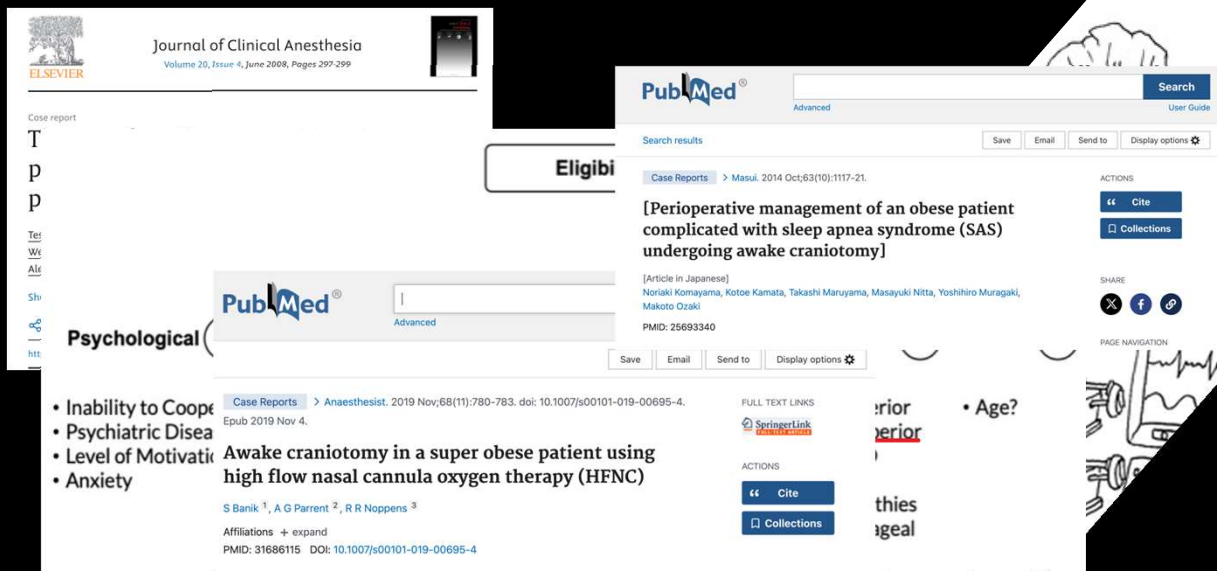# Awake Craniotomy

- Sedation / MAC
- Asleep–awake–asleep

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Awake Craniotomy

• should patients with obesity be excluded?

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Journal of Clinical Anesthesia
Volume 20, Issue 4, June 2008, Pages 297-299

Case report

Psychological

Eligibi

• Inability to Coope
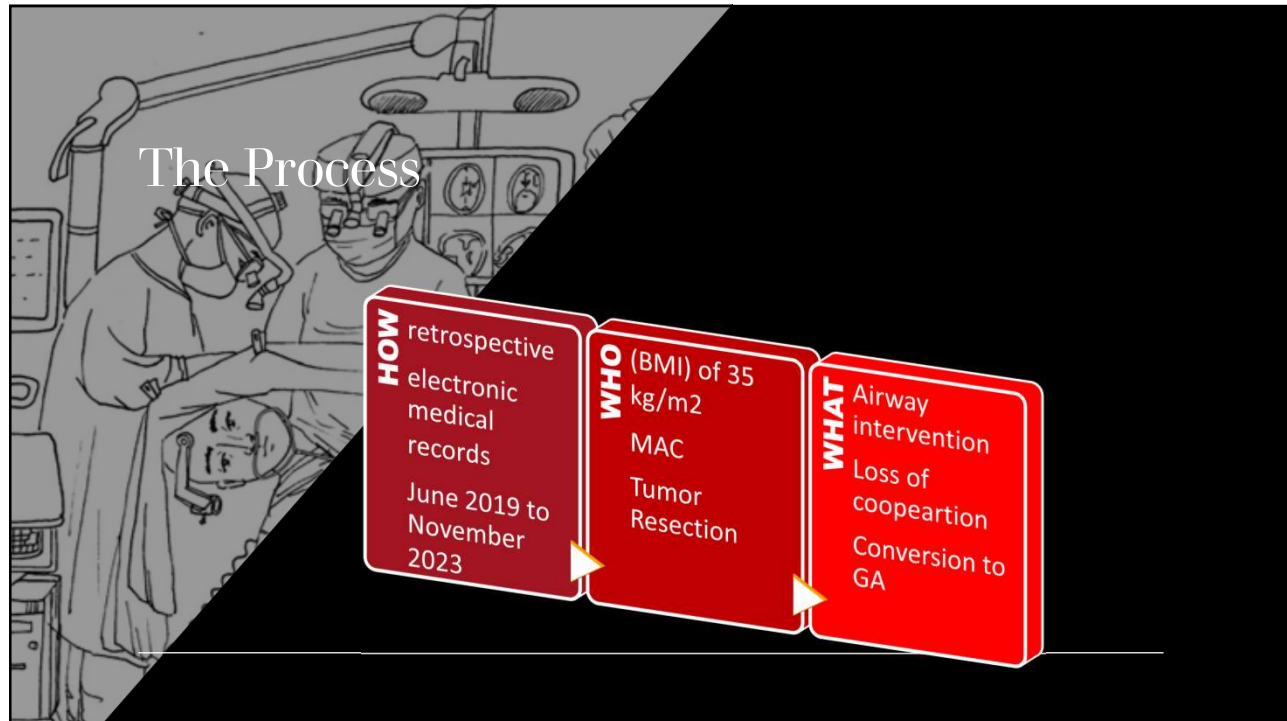• Psychiatric Disea
• Level of Motivatio
• Anxiety

Case Reports > Anaesthesist. 2019 Nov;68(11):780-783. doi: 10.1007/s00101-019-00695-4.
Epub 2019 Nov 4.

Awake craniotomy in a super obese patient using high flow nasal cannula oxygen therapy (HFNC)

S Banik [1], A G Parrent [2], R R Noppens [3]

Affiliations + expand
PMID: 31686115   DOI: 10.1007/s00101-019-00695-4

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Case Reports > Masui. 2014 Oct;63(10):1117-21.

[Perioperative management of an obese patient complicated with sleep apnea syndrome (SAS) undergoing awake craniotomy]

[Article in Japanese]
Noriaki Komayama, Kotoe Kamata, Takashi Maruyama, Masayuki Nitta, Yoshihiro Muragaki, Makoto Ozaki
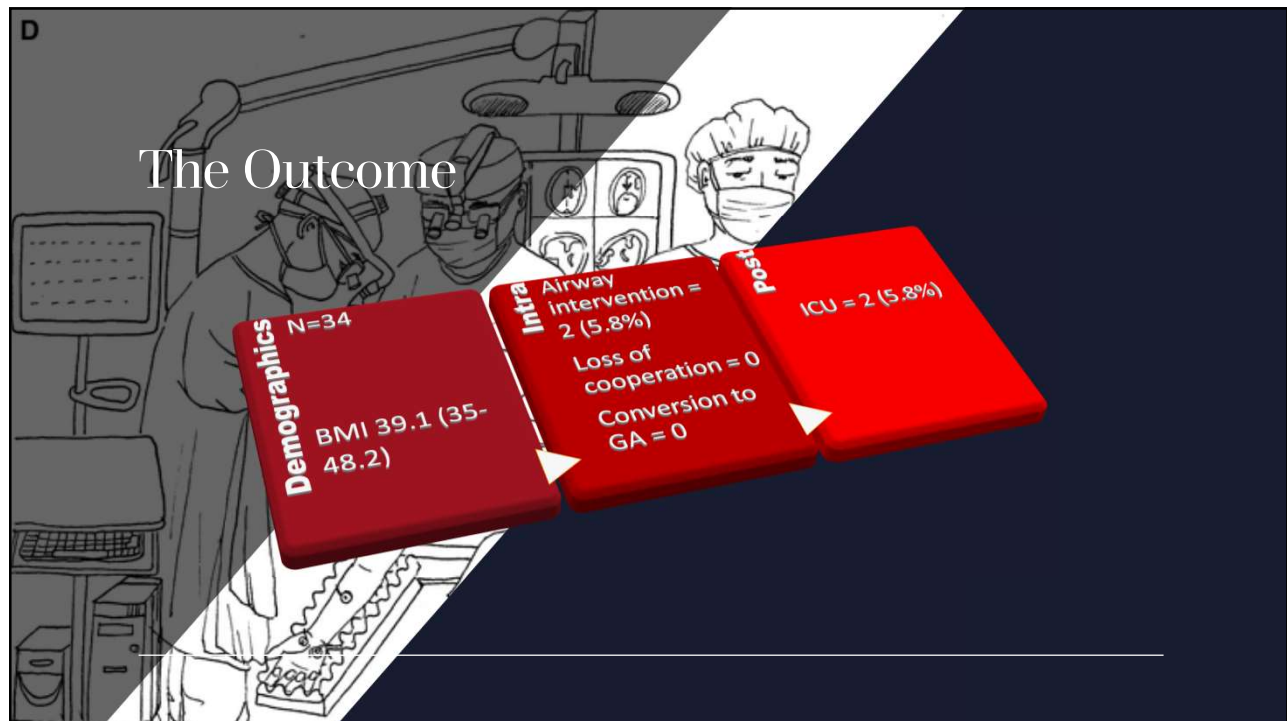PMID: 25693340

• Age?

Sivasankar, Chitra MD; Schlichter, Rolf A. MD; Baranov, Dimitry MD; Kofke, W. A... MD, MBA, FCCM. Awake Craniotomy: A New Airway Approach. Anesthesia & A... 122(2):p 509-511, February 2016. | DOI: 10.1213/ANE.0000000000001072

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The Process

HOW
retrospective

electronic medical records

June 2019 to November 2023

WHO
(BMI) of 35 kg/m2

MAC

Tumor Resection

WHAT
Airway intervention

Loss of coopeartion

Conversion to GA

7

The Outcome

Demographics
N=34

BMI 39.1 (35-48.2)

Intra
Airway intervention = 2 (5.8%)

Loss of cooperation = 0

Conversion to GA = 0

Post
ICU = 2 (5.8%)

8

The Outcome

Table 1. Patient Characteristics and Perioperative Data

	n $N = 34$	%
Demographics		
Male	9	27
OSA	7	21
BMI (35-39.9 kg/m², n (range)	23 (35– 39.5)	68
BMI > 40 (kg/m²), n (range)	11 (40.2-48.2)	32
Average BMI (kg/m²)	39.1	
Anesthetic medications		
Propofol	34	100
Remifentanil	34	100
Ketamine	34	100
Dexmedetomidine	3	8.8
Intraoperative airway intervention		
Nasal airway	1	2.9
Oral airway	0	0
Bag mask ventilation	1	2.9
Intubation	0	0
Intraoperative loss of Cooperation	0	0

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The comparison

Literature	Our study
Airway intervention 7-16%	5.8%
Conversion to GA 5.5%	0%
Loss of Cooperation 3.33%	0%
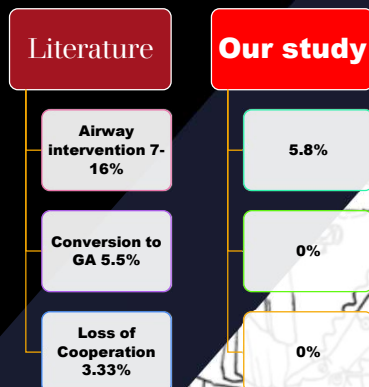
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Wait What ?

- Is it safer in patients with obesity ??
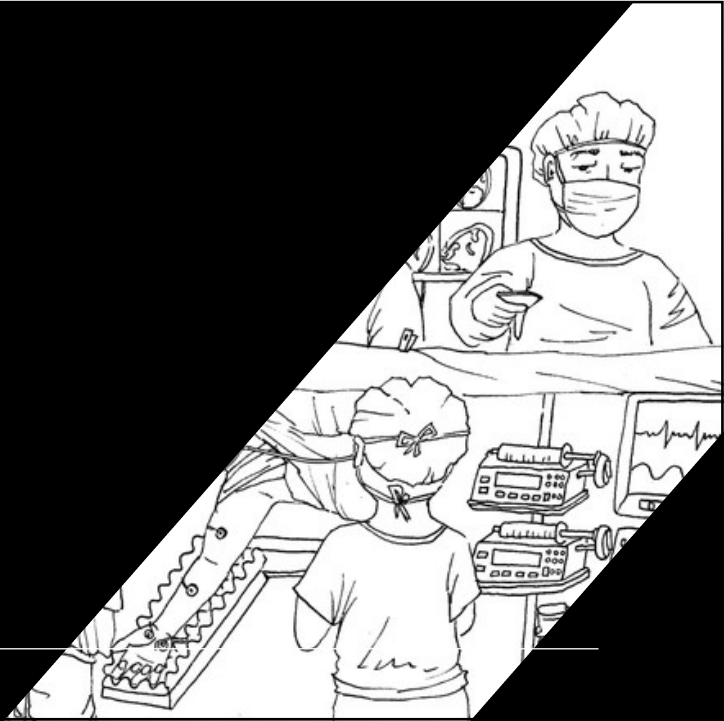
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The conclusion

First of its kind

Safety

Future

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THANK YOU

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The End

THANK YO

• Q ?

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