

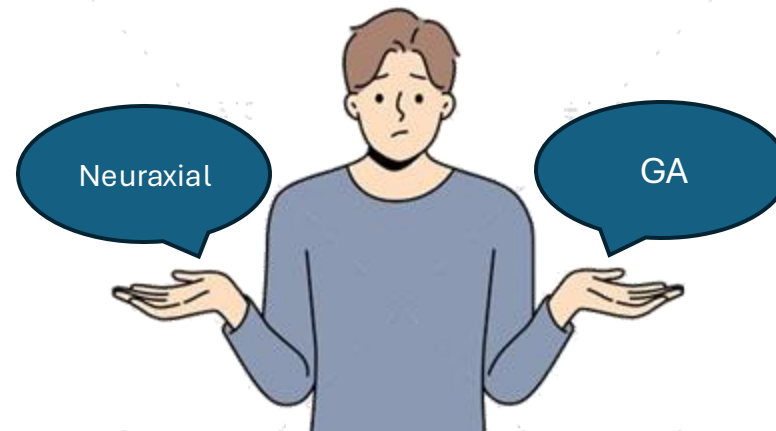
ANESTHETIC MANAGEMENT OF A PREGNANT PATIENT WITH SPINAL MUSCULAR ATROPHY TYPE II UNDERGOING CESAREAN SECTION

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Spinal Muscular Atrophy (SMA) Type II:

- neuromuscular disorder
- progressive muscle weakness, restrictive lung disease and skeletal deformities such as scoliosis.

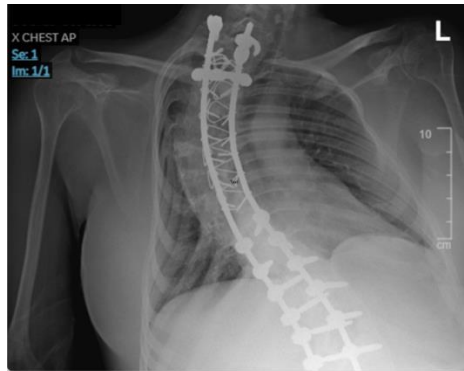
Significant respiratory compromise is common, requiring careful planning.



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32-year-old, G1P0, 35w6d, SMA II (wheelchair bound)

-> elective primary cesarean section



Severe scoliosis status post T1-L5 spinal fusion surgery at age 15



Moderate restrictive lung disease with severely limited diaphragmatic function.

Pulmonary consultation: evidence of sleep-disordered breathing and hypoventilation, and advised avoiding GA.



Preop visit: risks and benefits on both techniques, patient requested GA.



Chronic headache
4 small intracranial meningiomas



Intubation with Video laryngoscopy McGrath blade : Grade III view ETT 6.0 after 2 attempts.

NMB reversal with Sugammadex, bilateral QL blocks
Successfully extubated and weaned off oxygen without complications.

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Neuraxial anesthesia:

- technical difficulty and inadequate block from prior spine surgery, spinal anatomy
- avoids airway manipulation



Concerns regarding GA:

- Postoperative respiratory failure: prolonged intubation and ventilator dependence
 - Higher risk for difficult intubation
- Succinylcholine not recommended, and nondepolarizing neuromuscular blockers can have prolonged effect

General considerations:

- Positioning can be difficult : avoid injury due to contractures and osteopenia
- Pulmonary consultation
- No anesthesia technique is absolutely contraindicated or perfect, and ultimately, **patient preference** can factor into determining the best approach between safe anesthetic options.

Abati E, Corti S. Pregnancy outcomes in women with spinal muscular atrophy: A review. *J Neurol Sci.* 2018 May 15;388:50-60. doi:10.1016/j.jns.2018.03.001.PMID: 29627031
Islander G. Anesthesia and spinal muscle atrophy. *Paediatr Anaesth.* 2013 Sep;23(9):804-16. doi:10.1111/pan.12159.PMID: 23601145