

Myasthenic Syndrome following Caesarean Section

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Background

New onset myasthenic syndrome is a rare side effect of anaesthesia, and a differential that must be considered in presentations of ocular weakness following spinal or general anaesthetic administration intrapartum.

Patient Case

A 35 year old Nigerian woman underwent an emergency caesarean section for foetal distress. She had an ineffective epidural inserted intrapartum, and following a failed attempt at a spinal catheter in theatres the decision was made for a general anaesthetic caesarean section. Three hours post operatively the patient was unable to open her eyes, with skew deviation noted on passive eye opening. Her symptoms did not respond to sugammadex and neostigmine, and a CT stroke series revealed no pathology. Her symptoms resolved overnight and was hypothesised to be as a result of myasthenic syndrome secondary to anaesthetic neuromuscular blocking agents.

Discussion

No robust data on myasthenic syndrome following anaesthetic administration in individuals without underlying myasthenia gravis

Risk factors (1)

- African ethnicity
- Female

Difficulties in case

- Biochemistry: negative acetylcholine receptor and muscle specific tyrosine kinase receptors (2)
- CT stroke series: negative

Differentials (3)

- Metabolic
- Toxic myopathies
- Intracranial pathology
- Thymomas

Implications for future pregnancies and deliveries need to be considered (4)

Conclusions

Whilst evidence recommends the use of reversal agents for myasthenic syndrome triggered by neuromuscular blocking agents, there are no clear guidelines for management of myasthenic syndromes when these reversal agents are unsuccessful as in our case study.

There is a need for increased clinician awareness of drug induced myasthenic syndromes as a cause of ocular weakness following anaesthetic administration intrapartum.

References

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