



ANAESTHETIC MANAGEMENT IN MUCOPOLYSACCHARIDOSIS

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ABSTRACT The high prevalence of airway obstruction and cardiovascular manifestation possess high anaesthetic risk in morquio's diseases. which can be minimized by proper preop assessment, check ventilation before giving muscle relaxant and preparing difficult airway cart before intubation.

Aim: Airway & anaesthetic management in Mucopolysaccharidosis type IV.

KEYWORDS : Laryngoscopy, difficult airway cart (bougie, airway, uncuffed and cuffed smaller sized et tubes)

Aim:

Airway & anaesthetic management in Mucopolysaccharidosis type IV.

Introduction:

Mucopolysaccharidosis represents a group of rare lysosomal storage disorders associated with accumulation of glycosaminoglycans in tissues and organs.

The high prevalence of airway obstruction and cardiovascular manifestations possess high anaesthetic risk.

Case:

A 16-year-old male child having congenital hydrocephalus operated for VP shunt. Patient is diagnosed as mucopolysaccharidosis "Morquio's disease" in 2008 and presented with decrease vision in both eyes since 2 years and posted for VP shunt on administration of study drug, after induction, at laryngoscopy and intubation, at 1, 2, 3, 5, and 10 mins after intubation.

Patient had height 118cm, weight 16kg, head circumference 51 cm, large tongue, short neck, high anterior larynx, proptosis, cervical instability & skeletal deformity.

X-ray

Chest showed trachea shifted to right side.

X-ray dorsolumbar spine showed posterior displacement of L2 vertebra resulting in kyphotic deformity.

2D echo showed Moderate MS, Moderate MR & Bicuspid aortic valve.

During Airway examination we found Mallampati grade III with adequate mouth opening & 5cm Thyromental Distance.

Difficult airway cart was kept ready.

Anaesthetic management:

On the day of surgery, high risk informed consent was taken & vitals were monitored.

Preoperatively nebulization was done. Premedication was given. Pulse 149/min, NIBP 114/76mmHg, SPO2 99%

Preoxygenation: 100% oxygen given by Bain's circuit at 6-8L/min

Induction: Inj. Propofol 2.5mg/kg i.v., ventilation test was done. As ventilation was possible, we had given Inj. Scoline 2mg/kg i.v.



Laryngoscopy was done with McCoy blade and ET tube no. 5.5 cuffed inserted. Bilateral air entry checked and tube fixed.

Maintenance of anaesthesia: O₂ and sevoflurane
Inj. Atracurium - 0.5mg/kg loading i.v.,
0.1mg/kg incremental i.v.



Intraoperative vitals were monitored.

At the end of surgery, reversal inj. Neostigmine 0.05mg/kg was given.

After achieving consciousness & muscle tones of patient ET tube was removed with tube exchanger. Postoperatively period was uneventful.



REFERENCES:

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