

# Anestesia para Paciente Portador da Sequência de Moebius. Relato de Caso\*

## *Anesthesia in a Patient with Moebius Sequence. Case Report*

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### RESUMO

Hobaika ABS, Neves BS, Fernandes ML, Guedes VC - Anestesia para Paciente Portador da Sequência de Moebius. Relato de Caso.

**JUSTIFICATIVA E OBJETIVOS:** A sequência de Moebius (SM) é uma rara paralisia do VI e VII nervos cranianos. Alterações craniofaciais estão presentes em aproximadamente 90% destes pacientes, o que pode tornar a intubação traqueal muito difícil.

**RELATO DO CASO:** Paciente do sexo masculino, 2 anos e 5 meses, portador de SM, submetido à broncoscopia flexível para avaliação de laringotraqueomalácia. Comorbidades: crises de broncoespasmo e comunicação interventricular. Realizou-se indução anestésica com sevoflurano em O<sub>2</sub> a 100% e venoclise. Introduziu-se máscara laríngea AMBU® número 2,5 e o fibrobroncoscópio foi introduzido através da mesma. O procedimento foi realizado sem complicações e a broncoscopia revelou-se normal. O paciente recebeu alta para casa após duas horas.

**CONCLUSÕES:** O controle das vias aéreas é o grande desafio nestes pacientes, havendo relato de falha ou dificuldade de intubação em 13 pacientes de uma série de 41 casos analisados. Micrognatia, retrognatia, hipoplasia mandibular e fenda palatina são algumas características destes pacientes. Em outra grande série com 106 anestésias em pacientes com SM há descrição do uso da máscara laríngea em um caso. Parece não haver contra-indicação a realizar o procedimento em regime ambulatorial. Há relato de aspiração pulmonar e obstrução respiratória na sala de recuperação devido à dificuldade em deglutir e eliminar as secreções da boca e recomenda-se administrar antisialagogos.

**Unitermos:** COMPLICAÇÕES: ventilatória; DOENÇAS, Congênita: sequência de Moebius; EQUIPAMENTOS: máscara laríngea.

### SUMMARY

Hobaika ABS, Neves BS, Fernandes ML, Guedes VC – Anesthesia in a Patient with Moebius Sequence. Case Report.

**BACKGROUND AND OBJECTIVES:** Moebius sequence (MS) is a rare paralysis of the VI and VII cranial nerves. Craniofacial changes, which can hinder tracheal intubation considerably, are seen in approximately 90% of the patients.

**CASE REPORT:** A male patient, 2 years and 5 months old, with MS, underwent flexible bronchoscopy for evaluation of laryngotracheomalacia. Comorbidities: bronchospasm and interventricular communication. Anesthesia was induced with sevoflurane in 100% O<sub>2</sub>, followed by venoclysis. A number 2.5 laryngeal AMBU™ mask was inserted and the fiberbronchoscope scope introduced through the mask. The procedure evolved without complications and bronchoscopy was normal. The patient was discharged home after two hours.

**CONCLUSIONS:** Airways management is a great challenge in those patients with a report of failure or difficult intubation in 13 out of 41 patients. Micrognathia, retrognathia, mandibular hypoplasia, and palatine cleft are some of the manifestations seen in those patients. The use of a laryngeal mask was reported in one patient in a large series with 106 anesthetics in patients with MS. There does not seem to be contraindications to perform the procedure in an outpatient setting. Pulmonary aspiration and respiratory obstruction in the recovery room due to difficulty swallowing and eliminating mouth secretions have been reported, and the use of antisialagogues recommended.

**Keywords:** COMPLICATIONS: ventilatory; DISEASES, Congenital: Moebius sequence; EQUIPMENT: laryngeal mask.

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Apresentado em (**Submitted**) 27 de janeiro de 2009  
Aceito (**Accepted**) para publicação em 9 de fevereiro de 2009

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changes. Craniofacial changes can be seen in approximately 90% of patients, which might hinder tracheal intubation<sup>1,2</sup>. The laryngeal mask is part of the armamentarium available for the anesthesiologist to manage difficult airways; however, it has not been frequently used in patients with MS<sup>1</sup>.

### CASE REPORT

A male patient, 2 years and 5 months old, with MS, underwent flexible bronchoscopy for evaluation of laryngotracheomalacia. Associated comorbidities included: low set ears, anomalies of the ear lobes, hypoacusia, attacks of bronchospasm, dysarthria, and dysphasia. Two prior bronchoscopies revealed: 60% obstruction of the tracheal lumen and laryngotracheomalacia. Cardiac catheterism (1 year and 2 months) showed: anomalous origin of the right subclavian artery and interventricular communication. A CT scan of the head was normal. The patient was being treated with beclomethasone. Sevoflurane in 100% O<sub>2</sub> was used for anesthetic induction followed by peripheral venoclysis. A 2.5 AMBU™ laryngeal mask was introduced and, after confirming adequate pulmonary ventilation, the fiberbronchoscope was introduced through the laryngeal mask. The procedure lasted 11 minutes without complications, and pulse oximetry was never below 92%. Bronchoscopy was normal. The patient was transferred to the recovery room and after two hours discharged home.

### DISCUSSION

Patients with MS may present for several surgical procedures: orthopedic, dental, segmentary transplantation of the *gracilis* muscle, and strabismus. Airways management represents a great challenge in those patients, with a report of failure or difficult intubation in 13 out of 41 patients<sup>2</sup>. Micrognathia, retrognathia, mandibular hypoplasia, and palatine cleft are some of the characteristic features of those patients. The patient presented here had typical MS including cardiac defects. Usually, venoclysis can be difficult because patients may have short limbs, which was not the case here. In another series with 106 patients with MS, the laryngeal mask was used in only one case<sup>1</sup>. There does not seem to be contraindications for outpatient procedures; however, patients with MS can have central apnea and, therefore, the use of opioids should be avoided. Pulmonary aspiration and respiratory obstruction in the recovery room due to the difficulty swallowing and eliminating mouth secretions have been reported and, for this reason, the administration of anti-sialogogues is recommended<sup>2,3</sup>.

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### INTRODUCTION

Moebius sequence (MS) is a rare paralysis of the VI and VII cranial nerves associated with cardiac and osteomuscular

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RESUMEN

Hobaika ABS, Neves BS, Fernandes ML, Guedes VC - Anestesia para Paciente Portador de la Secuencia de Moebius. Relato de Caso.

**JUSTIFICATIVA Y OBJETIVOS:** La secuencia de Moebius (SM) es una rara parálisis del VI y VII nervios craneales. Las alteraciones craneofaciales están presentes en aproximadamente un 90% de esos pacientes, lo que puede hacer con que la intubación traqueal sea muy difícil.

**RELATO DEL CASO:** Paciente del sexo masculino, 2 años y 5 meses, portador de SM, sometido a la broncoscopia flexible para la evaluación de laringotraqueomalacia. Comorbidades: crisis de broncoespasmo y comunicación interventricular. Se realizó la inducción anestésica con sevoflurano en O<sub>2</sub> a 100% y venoclisis. Se introdujo la máscara laríngea AMBU® número 2,5 y el fibrobroncoscopio fue introducido a través de ella. El procedimiento fue realizado sin complicaciones y la broncoscopia fue normal. El paciente recibió alta después de dos horas.

**CONCLUSIONES:** El control de las vías aéreas es el gran reto para esos pacientes, habiendo relatos de falla o de dificultad de intubación en 13 pacientes de una serie de 41 casos analizados. Micrognatia, retrognatia, hipoplasia mandibular y la hendidura palatina, son algunas de las características de esos pacientes. En otra gran serie con 106 anestésias en pacientes con SM, hay una descripción del uso de la máscara laríngea en un caso. En régimen ambulatorial, parece no haber contraindicación para realizar el procedimiento. Existe un relato de aspiración pulmonar y obstrucción respiratoria en la sala de recuperación, a causa de la dificultad de deglutir y eliminar las secreciones de la boca y para ese caso se recomienda administrar antisialogogos.