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Double Barrel Nasopharyngeal Airway Ventilation When Mouth Is Not Opening

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Corresponding Author:
Dr. Deepak Gupta,
Anesthesiologist, Wayne State University - United States of America

Submitting Author:
Dr. Deepak Gupta,
Anesthesiologist, Self - United States of America

Other Authors:
Dr. Mohamed Ismaeil,
Clinical Associate Professor, Detroit Medical Center, Anesthesiology - United States of America

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Author(s): Gupta D, Ismaeil M

My opinion

For spontaneous, manual and mechanical ventilation when patient's mouth is not opening as anticipated during elective anesthesia scenarios like maxilla-mandibular fixation or facial flap and during emergent anesthesia scenarios like unanticipated masseter spasm,Â double barrel nasopharyngeal airway (NPA)Â [1] to keep nasal cavities and pharyngeal cavity open withÂ proximal end-tidal capnographyÂ (EtCO2) continuously monitoringÂ adequacy of ventilation may come in handy [2]. This has been independently conceived by us de novo and oblivious to pre-existing publication [3]. Manual and mechanical ventilation may be feasible with double lumen tube (DLT) connector connected to double barrel NPA via two universal 15 mm connectors appropriately sized to fit two NPAs being used as double barrel NPA. With DLT connector-based ventilation via double barrel NPA, neither nostril will need to be apposed to prevent air leak during manual and mechanical ventilation; moreover, individual NPAs can be independently suctioned as if suctioning DLT.Â If not using double barrel NPA, single NPA with contralateral nostril apposed can allow manual and mechanical ventilation via single NPA connected to appropriate size single universal 15 mm connector. In spontaneously ventilating patient, either nasal prongs inside double barrel NPA for continuous oxygen supplementation with integrated nasal EtCO2 sampling line [4], or T-piece on one NPA via universal 15 mm connector plusÂ sidestream EtCO2 airway adapterÂ with contralateral NPA open to air can be safe bet to keep airway open, supplement oxygenation and monitor ventilation concurrently and effectively. Therefore, manufacturers of NPA should consider packaging universal 15 mm connectors with their NPAs while manufacturers of DLT should consider independently packaged DLT connectors for use with double barrel NPAs.Â

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