Therapeutic bronchoscopy in ventilated neonates by Thin Fiberoptic Flexible Bronchoscope (FFB)

Background & Aim: Though flexible bronchoscopy has been well established for diagnostic and therapeutic purposes, it is rarely used in neonates. Now-a-days the availability of thin and ultrathin Fiberoptic Flexible Bronchoscope (FFB) allows the therapeutic bronchoscopy in ventilated neonates. This study aimed to outlines the clinical evidence of the utility of flexible bronchoscopy in ventilated neonates by thin flexible bronchoscope for management of atelectasis in neonate.

Materials & Methods: A total of six neonates underwent bronchoscopy by thin (Diameter 2.8 mm with 1.2 mm action Channel) fibre optic flexible bronchoscopes that were in ventilator and diagnosed as atelectasis clinically and radiologically in neonatal care unit (NICU) in Square Hospitals Ltd., from July to September 2018. FFB was introduced through endotracheal tube. X-ray was done in every neonate just after bronchoscopy.

Result: The results indicated that thick mucus plug was found in five neonates and blood clot was detected in one case in different parts of the airway. Mucus plug was removed by normal saline wash and blood clot was removed by Dormia basket. Radiological and clinical improvement of atelectasis was detected just after therapeutic bronchoscopy and all neonates were weaned from ventilator within 24 hours (Mean 14 hours). Death or severe complications during or after bronchoscopy did not occur to any neonate.

Conclusions: This study documented the therapeutic advantages offered by thin flexible bronchoscopy in ventilated neonates who developed atelectasis and hypoxaemia. Immediate results of therapeutic procedures on radiographs and clinical improvement were very encouraging.

Biography

Sarabon Tahura is a Medical graduate (MBBS) from Mymensingh Medical College under Dhaka University and obtained her professional degree FCPS (Paediatrics) from Bangladesh College of Physicians and Surgeon (BCPS). Afterwards, she has completed her fellowship in Paediatric Intervention Pulmonology from Qilu Children Hospital under Shandong University, China and training from All India Institute of Medical Science (AIIMS). She is the 1st Paediatric Interventional Pulmonologist in Bangladesh and experienced in teaching and conducting Post-graduation examinations. Many articles have been published under her name in different national and international journals and have been serving as an Editorial Board Member of repute.

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