BRONCHOALVEOLAR LAVAGE: NON BRONCHOSCOPIC - PICU - CHW

POLICY©

DOCUMENT SUMMARY/KEY POINTS

- Non bronchoscopic bronchoalveolar lavage is done infrequently, but is an important procedure in critically ill patients.

CHANGE SUMMARY

- This document has been reviewed and references updated, content and procedure has not changed.

READ ACKNOWLEDGEMENT

- Nursing and medical staff should read and be aware of this policy.

Approved by:	SCHN Policy, Procedure and Guideline Committee	
Date Effective:	1st January 2023	**Review Period**: 3 years
Team Leader:	Staff Specialist	**Area/Dept**: PICU - CHW

Introduction

- Non bronchoscopic bronchoalveolar lavage is an attempt to obtain microbiological specimens from a patient that will enhance/ change therapies. It is considered in patients that may be considered not suitable for a formal directed lavage using bronchoscopy – due to size (small), instability or equipment/proceduralist issues.
- Hence it is a non-directed "washing" of the upper and artificial airway, with the return being sent to the lab. It is typically well tolerated, but can destabilise a patient and should be discussed with the intensive care consultant. It can provide more information than a less invasive endotracheal aspirate.

Procedure

1. Following pre oxygenation an infant feeding tube is introduced down the endotracheal tube until resistance is felt.
2. Less than two years of age a 5 FG infant feeding tube. Greater than two years of age 8 FG catheters. Using a syringe (with capacity of a minimum of twice the volume of the lavage fluid used) 1 ml/kg of normal saline (up to a maximum of 20ml) is syringed through the feeding tube followed by a small amount of air to clear the dead space of the catheter.
3. Suction is then applied using the syringe. If no fluid is obtained, the catheter may need to be withdrawn 1 cm and the suction reapplied.
4. Return of fluid equals 30 to 50% of introduced volume.
5. Fluid should be sent for bacterial culture, viral culture and to histopathology. Consider also http://webapps.schn.health.nsw.gov.au/epolicy/policy/1397
6. One or two lavages should be performed.
7. BAL sample considered adequate if greater than 30% of the non-inflammatory cells are alveolar macrophages.

References

1. Schindler M.B, Cox P. N., A Simple Method of Bronchoalveolar Lavage, Anaesthesia and Intensive Care 1994; 22: 66-68.
2. S. C. ARORA*, Y. M. MUDALIAR†, C. LEE‡, D. MITCHELL§, J. IREDELL**, R. LAZARUS, Non-Bronchoscopic Bronchoalveolar Lavage in the Microbiological Diagnosis of Pneumonia in Mechanically Ventilated Patients; Anaesth Intensive Care 2002; 30: 11-20.