Clinical Evaluation research:

Searched for Clinical papers on

Comparable devices

Fisher & Paykel Neopuff
Fanem Babypuff 1020
GE Healthcare Panda T-Piece System
GE Healthcare Giraffe T-Piece System
GE Healthcare Giraffe Stand Alone T-Piece System
Draeger Resuscitaire T-Piece Resuscitation

T Piece resusitators

Results

Obstetric and Intrapartum Emergencies: A practical guide to managerment.

Discussing Airway and Newborn Infants.

Page 243 Recommending use of a bag and mask or preferably a Tom-Thumb type device.

Published : 2013, 2013

Mid Essex Guideline for Neonatal Resusitation

Appendix D – Required equipment Tom Thumb

2013

Neonatal resuscitation – a practical

approach. The experience of one UK

tertiary neonatal unit

Document id#15733

Optimal neonatal ventilation

http://gradworks.umi.com/34/53/3453856.html

2011

by Shelton, Julie A., D.N.P., THE COLLEGE OF ST. SCHOLASTICA, 2011, 72 pages; 3453856

The Neopuff Infant Resuscitator recently selected as a standard of care in the SMMC Neonatal Intensive Care Unit (NICU) and Birthplace, is a method of ventilating neonates that consistently delivers the same pre-set pressure with a consistent blend of oxygen and air; thus adequate ventilation/administration is not dependent on caregiver technique and experience.

University of Kentucky / UK HealthCare Policy and Procedure RC04-04P

Recommends usage of Neo Puff (T Piece resusitors)

Document ID#15734

Advantages of the Neopuff Resuscitator Operator sets PIP and PEEP pressures Resuscitator will not deliver PIP or PEEP above set pressures PIP and PEEP pressures are displayed on unit Operator controls the length of inspiratory time Resuscitator delivers 100% free flow oxygen reliably

US National Library of Medicine

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2675376/

and

A comparison of three neonatal resuscitation devices. 2005

http://www.ncbi.nlm.nih.gov/pubmed/16081202

CONCLUSIONS:

The T-piece resuscitator delivered the desired pressures more accurately, but required greater time to increase the PIP from 20 to 40 cmH2O. It was difficult to maintain a prolonged inflation and deliver the desired PEEP with the self-inflating bag even with the PEEP valve in place. There is a need for improvement in the design and function of current manual resuscitation devices and for prospective trials to evaluate the optimal method of bag and mask ventilation during resuscitation of the newborn infant.

NRP (Neonatal Resuscitation Program) 6th Edition

Lessons in positive pressure ventilation
includes usage of T Piece resusitators

Manual of Neonatal Care

edited by John P. Cloherty, Eric C. Eichenwald, Anne R. Hanse

It offers greater control over manual ventilation by delivering breaths of reproducible size (peak and end-expiratory pressure) and a simplified method to control delivered breath rate.

Using a regulated means of admisniration, such as a T-piece resusciator or ventilator, is preferable.

WORKSHEET for Evidence-Based Review of Science for Emergency Cardiac Care

2009
Includes Risks / Benefits of T Piece resuscitator units
Document id#15731
and
Document id# 15732
Clinical question :

In newborns (P) requiring positive pressure during resuscitation, is positive pressure ventilation by T-piece resuscitator (I) superior to bag ventilation (C) for improving outcome - specify (O)?
27 JaN 2010,

CONSENSUS ON SCIENCE:
• There are no clinical studies in newborns requiring positive pressure during resuscitation to support or refute superiority of the T-piece resuscitator over bag ventilation in improving outcome.
• In mechanical models, target inflation pressures are delivered more consistently when using T-piece resuscitators than with self-inflating bags. (LOE 5 - Hussey 2004, F490; Oddie 2005, 109; Finer 2001, 299)
• In mechanical models, PEEP is maintained more consistently with T-piece resuscitators compared with self-inflating bags. (LOE 5 - Finer 2001, 299)
• In mechanical models, the ability to deliver a sustained inflation is better with either a T-piece resuscitator or flow-inflating bag compared with a self-inflating bag. (LOE 5 - Bennett 2005, 113)