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AUGUST NEWSLETTER

Saskatchewan Respiratory Therapy Education Committee

Minimally Invasive Surfactant Therapy

AS MIST BECOMES MORE COMMON IN NEONATAL CARE WE HOPE THIS CAN BE A GOOD RESCOURCE

- Minimally invasive surfactant therapy (MIST) has become the standard of care in delivering surfactant noninvasively in many parts of the world
- MIST use has more than doubled since 2018. However, InSurE (INtubation-SURfactant delivery Extubation) remains the most prevalent method of surfactant delivery in non-intubated patients.
- When comparing patient groups who received NIPPV + MIST to NIPPV + InSurE, the NIPPV + MIST group demonstrated a shorter total administration time, lower rate of invasive ventilation support, shorter duration of noninvasive ventilation, reduced hospital stay, and fewer cases requiring re-administration of PS.
- Compared to the InSurE + NIPPV group, the NIPPV + MIST group showed higher arterial partial pressure of oxygen, oxygenation index, and interleukin-4 (IL-4) levels, lower partial pressure of carbon dioxide, fraction of inspired oxygen, interferon-gamma (IFN-γ), and IFN-γ/IL-4 ratio, lower bronchopulmonary dysplasia incidences, vocal cord injury, and laryngeal edema
- The long-term effects of MIST in preterm infants with respiratory distress syndrome remain to be definitively clarified. However, infants who received MIST had lower rates of adverse respiratory outcomes during their first 2 years of life.

WHAT DID THE ETT SAY TO THE SUCTION CATHETER?

GET INLINE.

SOCIAL MEDIA HIGHLIGHT: @THENICUDOC

SASKRTEC'S QUARTERLY WEBINAR RECORDING FROM JUNE 26TH ON THE TOPIC OF VENTILATOR ASYNCHRONY PRESENTED BY MELODY BISHOP, RRT/CCAA, IS POSTED TO OUR WEBSITE.

Educational Resources

MINIMALLY INVASIVE SURFACTANT THERAPY

ARTICLE RESOURCES

- Clinical efficacy of minimally invasive surfactant therapy combined with nasal intermittent positive pressure ventilation in the treatment of neonatal respiratory distress syndrome
- Two-Year Outcomes After Minimally Invasive Surfactant Therapy in Preterm Infants: Follow-Up of the OPTIMIST-A Randomized Clinical Trial
- Efficacy and safety of surfactant administration by MIST and INSURE techniques in Neonates with Respiratory Distress Syndrome: A randomized controlled trial
- A Survey of Minimally Invasive Surfactant Use in the United States

If you're having difficulty accessing the articles SHA Library Services is a great resource available to all SHA employees. Feel free to contact them to setup a library card number to obtain off site access.

SUMMARIES & GUIDELINES

- Guidelines for surfactant replacement therapy in neonates

VIDEO RESOURCES

- Minimally Invasive Surfactant Therapy. Learn LISA, LIST, MIST, and New SALSA and Aerosolized Methods
- Hobart Method of Minimally Invasive Surfactant Therapy Administration in a Resuscitation Manikin
- Minimally invasive surfactant therapy: Ready for prime time? Dr. Peter Davis, Australia
- Minimally Invasive Surfactant Therapy (MIST) Procedure CHOP / HUP
- Two-Year Outcomes After Minimally Invasive Surfactant Therapy in Preterm Infants (OPTIMIST-A RCT)

PODCASTS

- Minimally Invasive Surfactant Therapy for Preterm Infants JAMA December 2021 Issue
- Two Year Outcomes of Miniamlly Invasive Surfactant Therapy

WEBINARS

SaskRTEC's quarterly webinar recording from June 26th on the topic of Ventilator Asynchrony presented by Melody Bishop, RRT/CCAA, is posted to our website.

Stay tuned for more info about our quarterly webinar next month. Date and time to be announced soon.

As we continue to grow this committee we are finding a need for more members. If you're interested in joining the SaskRTEC please send us an email at saskrtec@gmail.com or reach out to a committee members directly.