

MEDICARE LA TRACHEOSTOMIA



Best practices
pediatriche a confronto

Prevention of Pressure Ulcers After Pediatric Tracheotomy Using a Mepilex Ag Dressing

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Mepilex Ag (Mölnlycke Health Care, Norcross, GA) is a soft, absorbent adhesive dressing designed to manage exudative wounds such as pressure ulcers. When applied to the skin, the foam padding diminishes the effects of stressful forces on the soft tissue while the sustained antimicrobial action of the ionic silver reduces any bacterial burden.^{11,12} The dressing also seals skin margins to keep moisture out. At our institution, the pediatric otolaryngologists currently apply Mepilex Ag under the tracheostomy tube and twill ties at the conclusion of every procedure (Fig. 1). We hypothesized that the application of a Mepilex Ag foam dressing around the tracheotomy site reduces the incidence of postoperative pressure ulcer formation.

Studio retrospettivo 2005-2011;
Monroe Carell Jr. Children's Hospital,
Nashville, Tennessee

Benefits di Mepilex Ag

IL SUO UTILIZZO E RISULTATO STATISTICAMENTE SIGNIFICATIVO

Results: Patients undergoing tracheotomies prior to February 2010 had no dressing applied under the tracheostomy at the end of the procedure (n = 93). Beginning in February 2010, Mepilex Ag barrier was applied beneath the tracheostomy and ties in all subjects undergoing tracheostomy (n = 41). In the cohort without Mepilex Ag, 11.8% developed skin breakdown by the time of first tracheostomy tube change. When Mepilex Ag was used to pad the tracheostomy site, no peristomal skin breakdown occurred ($P = 0.02$). No comorbidities were associated with postoperative ulcer formation in either cohort.



P value < 0,05!

Care of pediatric tracheostomy in the immediate postoperative period and timing of first tube change

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period, even for dressing changes. In our protocol, a fresh drain sponge was placed under the tracheostomy tube flanges by the surgical team each day until the first tube change. This provided a barrier between the device and the cervical skin, wicking away secretions and moisture. Daily dressing changes also allowed for close examination of the wound and early identification of potential problems. There were no complications with tube dislodgement or decannulation associated with this practice. We believe that this practice greatly reduced the incidence of cervical skin ulceration.

Studio retrospettivo
Case series 2010-2014;
Rush University Medical
Center, Chicago, Illinois

**protocollo
postoperatorio
standardizzato**

CONCLUSIONI

patient's bedside as early as 3 days after surgery. A post-operative pediatric tracheostomy care protocol consisting of securing the tracheostomy tube with soft foam hook and loop closure straps, earlier first tracheostomy tube change, and daily dressing changes facilitates better hygiene, results in decreased rates of cervical skin breakdown, and allows earlier initiation of family caregiver tracheostomy education.

Outcomes positivi dati dal cambio giornaliero della medicazione

Prevention of post-operative pediatric tracheotomy wounds: A multidisciplinary team approach

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The lack of manipulation and standardized complete neck skin inspection by anyone was the ideal setting for wound development. Daily examination and identification of areas of skin breakdown or improper equipment placement is an essential part of any wound care regimen [5]. Immediately addressing all early stage wounds (stage 1 and 2) prevents further progression. The early wounds were treated with a silver-impregnated, antimicrobial barrier dressing (Mepilex Ag) as well as by adjusting any applicable equipment and/or with patient positioning changes.

Analisi prospettica,
2012-2016;
Nationwide
Children's
Hospital,
Columbus,
Ohio

POST OPERATIVE TRACHEOTOMY WOUND CARE PROTOCOL

Multidisciplinary Team

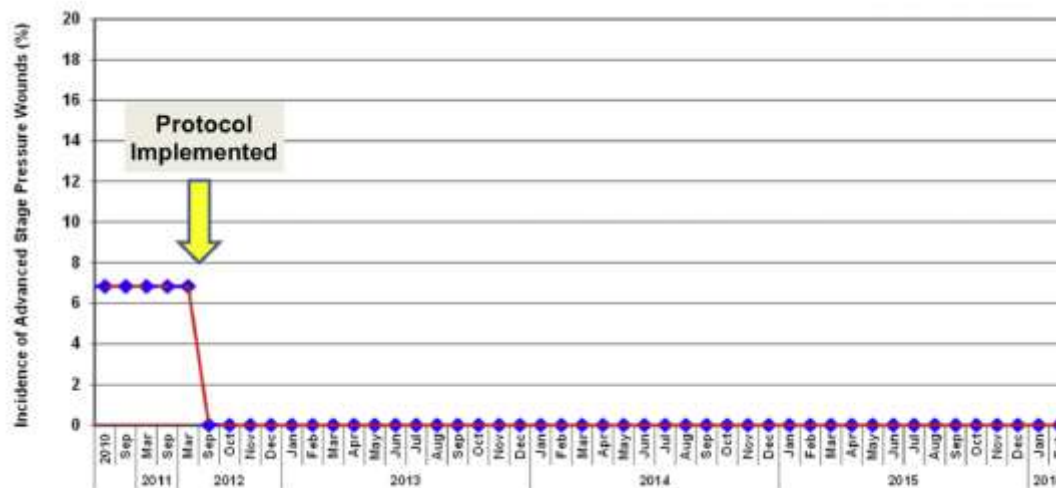
- 1) Senior level otolaryngology resident (PGY 4 or 5) or pediatric otolaryngology fellow
- 2) Certified wound care specialist
- 3) ICU Bedside nurse
- 4) Respiratory therapist

Daily Dressing Protocol

- 1) POD#1, the Mepilex Lite dressing and Velcro tie are removed. The tracheostomy tube is stabilized by otolaryngology team.
- 2) The neck skin is cleaned with sterile water and dried with gauze.
- 3) The bedside nurse performs skin care with dilute hydrogen peroxide and skin dried with gauze.
- 4) Cavilon 3M, no sting barrier film is applied to skin where barrier dressing is to be placed.
- 5) New Mepilex Lite is then placed in circumferential barrier configuration around the neck (See Figure 2).
- 6) The tracheostomy tube is secured with a new Velcro collar by the otolaryngology team.
- 7) A final check by entire team to ensure proper positioning (avoiding neck flexion onto ventilator connector), ventilator circuit not under tension, and appropriate level of sedation. Proper positioning and sedation level reviewed daily with ICU bedside nurse by rounding team, and then formally checked out by bedside nurses between shift changes.

LESIONI POST OPERATORIE AZZERATE!

attention to any visible skin changes by this rounding team has been able to identify all pressure-related wounds while still at an early stage preventing progression. Since September 2012, we have had no post-operative, advanced stage pressure wounds and no cases of accidental decannulation related to this protocol. Future directions include strategies to reduce daily labor and dressing material costs without compromising clinical outcomes.



Enhanced Tracheostomy Wound Healing Using Maltodextrin and Silver Alginate Compounds in Pediatrics: A Pilot Study

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QUICK LOOK


Current knowledge

Tracheostomy wounds are commonly encountered in children. Few treatments are available or investigated to manage this difficult problem. Healing times for pediatric tracheostomy wounds are unpredictable and protracted.

What this paper contributes to our knowledge

Postoperative tracheostomy wounds are common complications. The use of maltodextrin gel (MD) and silver alginate foam pads (AG) provided an effective treatment for tracheostomy-related ulcers in pediatric patients.

Studio retrospettivo, 2009-2010; Arkansas Children's Hospital



**NUOVO
APPROCCIO
AG+MD**

L'ACCOPPIATA VINCENTE nella cura delle lesioni



SOGGETTI TRATTATI CON MALTODESTRINE E ALGINATO AG

Table 1. Subjects Treated With Maltodextrin and Silver Alginate Compounds

Patient	Age (y)	Wound Location	Wound Stage	Treatment	Duration (d)
1	15.4	Infrastoma	2	MD + AG	8
2	3.8	Infrastoma	2	MD + AG	14
3	3.2	Infrastoma	2	MD + AG	6
4	0.9	Lateral neck	3	MD + AG	21
5	0.3	Infrastoma	3	MD + AG	10
6	12.2	Stoma and infrastoma	4	MD + AG	28
7	15.6	Stoma and infrastoma	3	MD + AG	22
8	0.8	Infrastoma	3	MD + AG	12
9	0.5	Infrastoma	2	MD	6
10	5.7	Infrastoma	2	MD	6
11	0.3	Infrastoma	2	MD + AG	8

MD – maltodextrin

AG – silver alginate foam

IL LORO UTILIZZO SI E' DIMOSTRATO UN TRATTAMENTO VALIDO, NUOVO ED EFFICACE NEL TRATTAMENTO DELLE LDP

This pilot study demonstrates that the use of AG and MD for tracheostomy-related wounds is effective for tracheostomy wound healing. This has developed into the new standard of care at our institution. All wounds managed with these treatments in this study completely healed and did not require removal of the tracheostomy tube or surgical intervention.

PUNTI CARDINE PER UNA BUONA CARE DELLA TRACHEOSTOMIA

- Controllo e ispezione giornaliera della ferita tenendo presente il livello di sedazione del bambino, la sua postura, la pressione esercitata dalla fascetta e la posizione del circuito del ventilatore (se presente)
- Cambio quotidiano di pad (tipo Mepilex Ag) e fascette
- Detersione con garze e soluzione fisiologica 0,9% dello stoma (manovra sterile nei primi 7 gg)
- Uso combinato di Alginato Ag + maltodestrine gel per la cura delle ldp

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GRAZIE PER L'ATTENZIONE

