



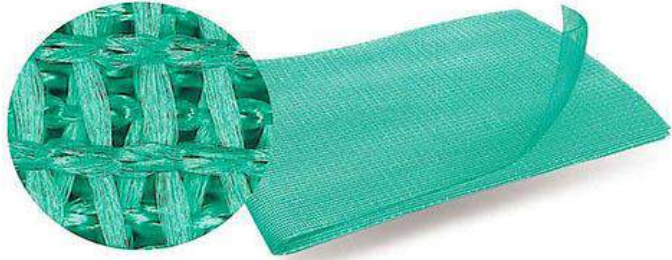
A PILOT FEASIBILITY STUDY ON THE USE OF
DIALKYL CARBAMOYL CHLORIDE DRESSING (DACCD) FOR THE PREVENTION
OF EXIT SITE INFECTION IN A PEDIATRIC POPULATION

GIORGIO LAMBERTI

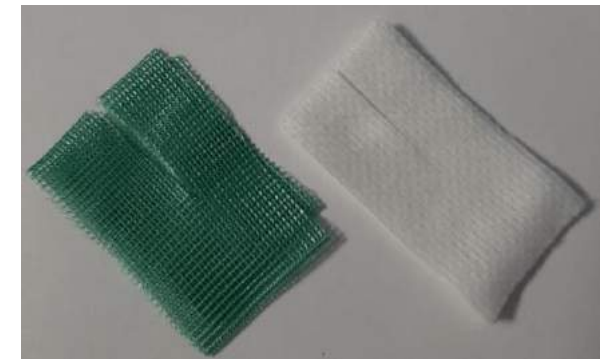
“INFERRMI” HOSPITAL RIMINI - ITALY



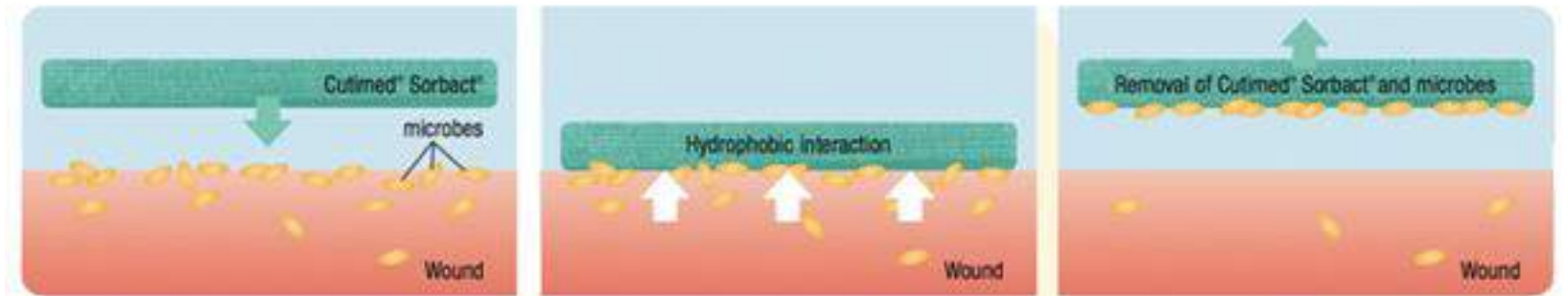
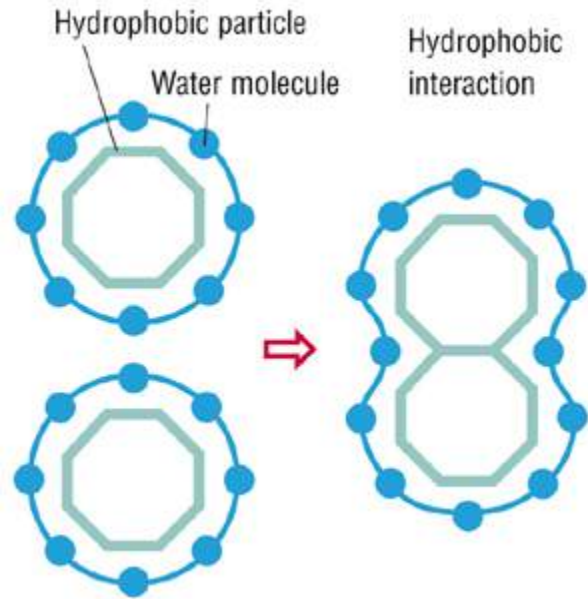
DIALKYL CARBAMOYL CHLORIDE (DACCC) DRESSING



Acetate gauze impregnated with a fatty acid derivative, dialkylcarbamoyslchloride (DACCC), a highly hydrophobic substance that induces microorganisms to bind firmly to the fibers of the dressing itself




BACTERIAL UPTAKE FOR THE PREVENTION AND TREATMENT OF THE EXIT SITE INFECTION



Clinical trial protocol

JVA | The Journal of
Vascular Access

A GAVeCeLT bundle for central venous catheterization in neonates and children: A prospective clinical study on 729 cases

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Mauro Pittiruti¹ , **Davide Celentano²**, **Giovanni Barone³** ,
Vito D'Andrea⁴ , **Maria Giuseppina Annetta⁵** and **Giorgio Conti²**

- 1) Preprocedural evaluation (RaCeVa and RaFeVa)
- 2) Appropriate aseptic technique (hand hygiene, maximum barrier protections, skin antiseptis with 2% chlorhexidine)
- 3) Ultrasound-guidance (Real-time ultrasound guided venipuncture)
- 4) Intra-procedural verification of the central position of the tip by non-invasive methods (IC-ECG and RT US)
- 5) Tunnelling according to RAVESTO protocol (Rapid Assessment of Venous Exit Site and Tunneling Options)
- 6) Sutureless securement of the catheter
- 7) Protection of the exit site with glue and semipermeable transparent membranes

N-P VAT AUSL ROMAGNA EXPERIENCE

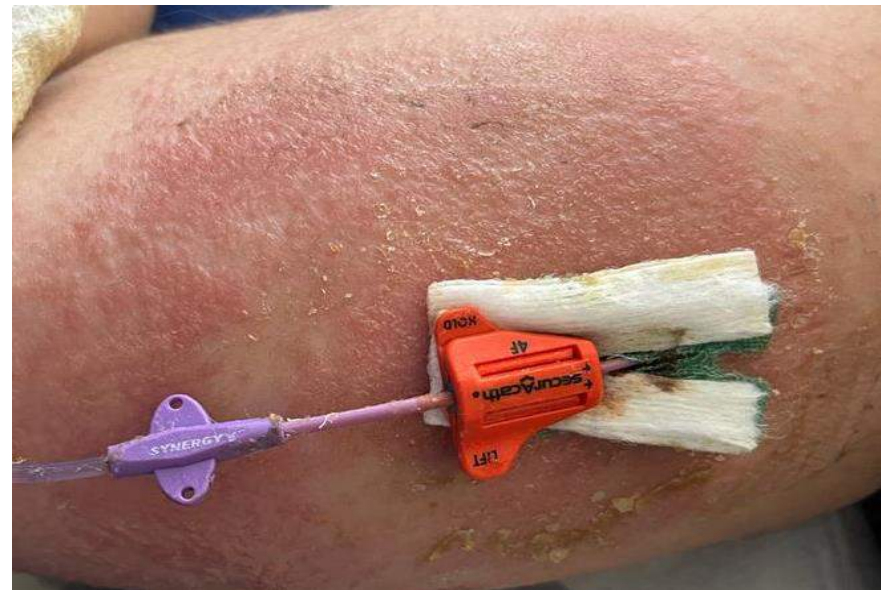
• Number of catheters	• Pediatric patients	• Newborn patients	• Total patients
• Mean age	• 88 (19 in situ)	• 30 (3 in situ)	• 118
• Age min - max	• 7,25 years	• 38 weeks GA	
• M:F	• 0 - 17 years	• 35,1 - 40,2 weeks GA	
• CICC	• 52:36	• 16:14	• 68:50
• PICC	• 46	• 23	• 69
• FICC	• 35	• 0	• 35
• CVP	• 4	• 7	• 11
• Tunnelled	• 3 (midline)	• 0	• 3
• Average stay time (days)	• 57	• 28	• 85
• Number of dressings	• 113	• 28	• 93
• Exit-site infection	• 1578	• 143	• 1721
• CVC-related infection	• 0	• 0	• 0
• Thrombosis	• 0	• 0	• 0
• Other complications	• 1 (1,1%)	• 1 (3,3%)	• 2 (1,7%)
• Off-therapy removal	• 3 (3,4%)	• 0	• 3 (3,4%)
	• 78 (89%)	• 29 (97%)	• 107 (91%)

N-P VAT AUSL ROMAGNA EXPERIENCE

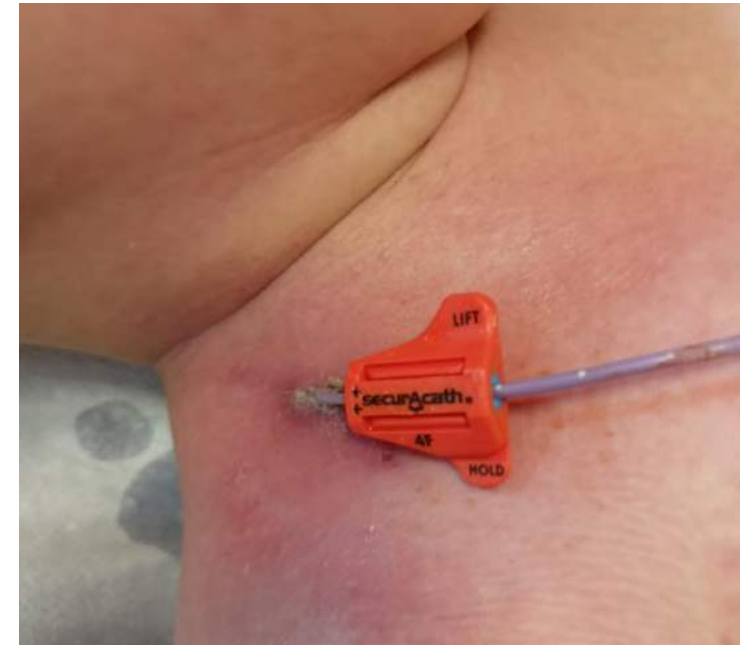
Dataset of 11151 catheter days:

- 0 cases of local infection of the exit site (0/1000 catheter days)
- 0 cases of CVC-related infection (0/1000 catheter days)
- 2 cases of catheter-related thrombosis (0,18/1000 catheter days)
- 2 MARSI always managed with DACC dressing with healing in 4 weeks (0,18/1000 catheter days)
- 1 dehiscence of the exit site with complete resolution after 2 weeks with DACC dressing (0,9/1000 catheter days)

N-P VAT AUSL ROMAGNA EXPERIENCE



N-P VAT AUSL ROMAGNA EXPERIENCE



N-P VAT AUSL ROMAGNA EXPERIENCE



DACC dressings

- Reduce the signs of peri-focal inflammation
- Reduce or eliminate local infection
- Improve and accelerate wound healing
- Are totally safe in all patients (including newborns)
- Have broad compatibility with other exit site management products
- Are easy handling during dressing changes
- Are inexpensive



ADVANTAGES OF DACC dressings

- There are no known side effects, risks of cytotoxicity or allergic reactions
- By acting according to the physical principle of hydrophobic interaction, the microorganisms bind to the dressing and do not leave waste and endotoxins in the wound bed that could hinder the healing process
- Theoretically there are no risks of developing bacterial resistance



CONCLUSIONS

In our experience, the bacterial uptake dressing is easy to use, well tolerated by pediatric and/or fragile skin patients and neonates. The use of pre-packaged DACC dressing has also led to a reduction in costs and dressing times. It could potentially have an advantage both in terms of preventing CVC-related infections, and in terms of reducing the healing time of any infections localized at the exit site. It represents a promising tool as a strategy for infection prevention.



Multicenter randomized study to evaluate its efficacy and safety compared to the already standardized current techniques of exit site dressings such as cyanoacrylate glue and/or chlorhexidine felt pads

DIALKYL CARBAMOYL CHLORIDE (DACC): A NEW VISION IN BACTERIAL LOAD MANAGEMENT OF THE EXIT-SITE ?



Thanks