The addition of Nanocrystalline Silver (Nano-Ag)** dressings to the incision line
Single use negative pressure wound therapy (suNPWT) is an advancement in
pressure to be maintained across the incision at a continuous, uninterrupted
designed dressing attached to a small, portable pump that generates an
tension off the wound edges eliminating motion (and allowing for stabilization
period. Second, continuous suction placed on the incision line should take the
complications.
GNCH
decreasing patient readmission, reoccurrence of infection, nursing costs, and
wound incision has the potential to improve clinical outcomes and to treat
and dressing choice for this patient group.
Camille Ream RN BScN ET, Rahimah Moosa RN BScN ET, Heidi de Lange RN BScN, Grey Nuns Community Hospital, Edmonton, Alberta

Introduction

Camille Ream RN BScN ET, Rahimah Moosa RN BScN ET, Heidi de Lange RN BScN, Grey Nuns Community Hospital, Edmonton, Alberta

METHOD

Seven patients with planned C-sections and a BMI >35 were chosen for the trial. The suNPWT* device was applied in the nursery immediately after delivery and remained in situ for 7 days. OFF-FOOT incisional closure techniques were used by the physician in each case. All patients received antibiotics prophylactically pre-operatively by the patients.

Dressings were removed by the Interventional Therapist in the Outpatient department on day 7. They were considered a 'Healthier poppulation' assessed and photographed the wounds during the C-section and during follow up visits when the dressing was removed. The case studies include information on the pre-operative, intra-operative and post-operative experience through pictures, testimonies and feedback from the surgeons, staff, patients and experts involved in the trial.

OUTCOMES – nursing

On site education was provided to staff – staff felt that only needed to attend one session to become comfortable with the suNPWT device.

• Initially, staff were concerned about not being able to assess the wound daily
• There was no need for post-op dressing changes, only monitoring was needed – this was a benefit for both the patient and nurses
• Nurses indicated that this dressing application was easier and faster than traditional NPWT
• Nurses reported no issues with maintaining suction or getting a seal

OUTCOMES – patients

• Patients reported that they had easier movement and mobility immediately post-operatively
• There were no dressing changes required which allowed them to focus on their baby rather than worry about their wound
• Dressing was comfortable
• Patients felt more secure with dressing and happy to not have to look at dressing changed every day
• They were able to shower with the dressing in situ
• The pump was easy to operate and needed minimal help for set up or at home

OUTCOMES – clinical

Single use HPWT has proven to be an efficient dressing for treating high risk C-section patients. It has proven to be user friendly, and has led GNCH to evolve in to the 21st century where the transition of wound care will create a movement towards removing some of the constant and periodic dressing changes. The product was easy to apply and to maintain.

Conclusion

Utilizing the single use negative pressure therapy system helped to prevent wound dehisceces on all of the patients. Staff reported that the product was easy to apply and to maintain.

Our findings suggest, that with the adoption of single use negative pressure therapy, there is a decrease in the amount of post-operative complications and discomfort for patient care, patient decrease in the amount of dressing changes and monitoring of the wound for staff and patient, and decrease in the need for healthy Beginnings and Home Care Surveillance in healthy, post-op C-section patients with BMI ≥35.

This has led us to develop dressing guidelines for continued use of single use negative pressure wound therapy dressing for our high risk patients, in addition to a change in practice for our low risk patients.

We have started to see positive outcomes for patients because their surgical incisions are taken care of, so they spend less time worrying about their incision and more time bonding with their newborn baby. The ET nurse and OB nurse team is leading this change for our C-section patients.

Moving forward

We have been working with the GNCH best practice team to develop a poster laying out clinical Dressing Guideline, preprinted Patient Care orders to make the directions clear and easy to follow, discharge Information sheet/pamphlet for patients about wound care and dressing removal for patients and change to the pre-admission process to include BMI (at time of surgery) on the booking sheet, and to have the patients identified as High, Medium or Low Risk.

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