

Wound and Fistula Management

Mary Vendetti

Stomal Therapy Nurse Specialist

Auckland District Health Board

wound and fistula management

I would like to present three short case studies:

- large open abdominal wound with jejuno-jejunal fistula, entero-atmospheric fistula and end ileostomy.
- multiple small abdominal fistulae.
- a paediatric divided colostomy with a mucous fistula.

wound and fistula management

What is a fistula?

- a fistula is an abnormal connection between two hollow spaces, such as blood vessels, intestines or other hollow organs.
- fistula's are usually caused by injury or surgery, but they can result from an infection or inflammation.
- an entero-atmospheric fistula occurs in the gastro-intestinal tract in an open wound without overlying tissue

wound and fistula management

Melanie

Managing a large open abdominal wound

In May 2015 Melanie a 63 year old Dutch tourist was a restrained passenger in the back seat of a car involved in a high speed car crash.

Melanie sustained severe chest and abdominal injuries she was transferred to Auckland City Hospital ED from Middlemore Hospital.

In ED she had a cardiac arrest due to hypo-volaemic shock.

Cardiac output was restored with chest compressions and a massive fluid transfusion.

Melanie underwent an emergency laparotomy which found a large volume of blood within her abdomen, a splenic laceration, multiple mesenteric tears in the small bowel mesentery as well as the colonic mesentery and the transverse colon.

wound and fistula management

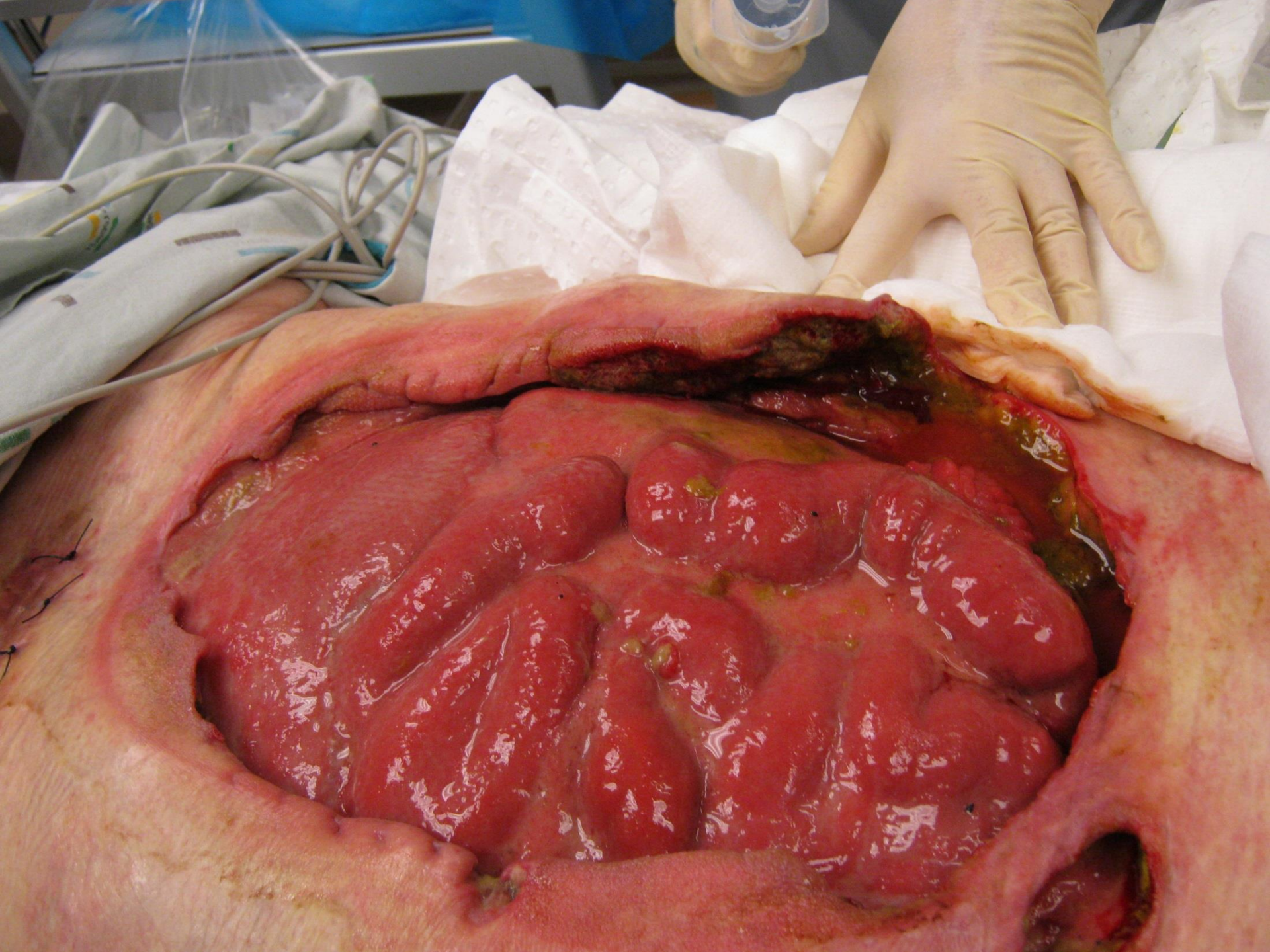
Melanie's condition was critical she endured multiple surgical procedures and she developed life-threatening complications.

Her abdominal wound was left open and a VAC dressing was applied in theatre.

The VAC dressing wasn't successful and DCCM contacted stoma nurses.

We visited Melanie jointly in DCCM to review her abdominal wound.

- wound measures 26cm long x 18cm wide
- wound edges very fragile
- end ileostomy stoma R) side of wound
- jejuno-jejunal fistula L) side of wound





wound and fistula management

After reviewing Melanie's abdominal wound it was obvious that one Eakin pouch would not be big enough to contain her wound.

So we trialled "saddle bagging" her wound.

equipment required

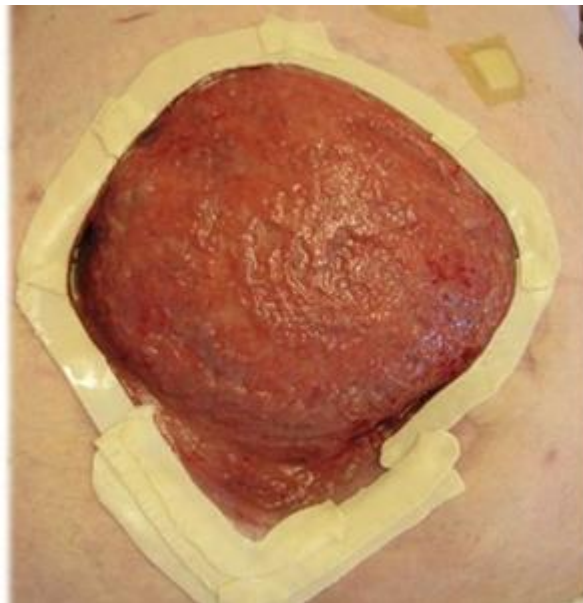
- (x2) extra large eakin wound pouches
- cohesive skin barriers
- scissors
- felt pen
- Paste
- one piece clear drainable pouch

wound and fistula management



wound and fistula management

Picture framing a wound



wound and fistula management

Niki

Multiple abdominal fistulas

In January this year Niki a 24 year old woman previously well with no significant medical history was the restrained driver of a car that hit a parked truck.

- Niki sustained traumatic thoracic aortic injury with pseudo-aneurysm formation.
- L) sided rib fractures.
- significant hepatic laceration .
- probable pancreatic injury.
- possible duodenal injury
- R) compound patella fracture

wound and fistula management

Niki remained in DCCM from January until May – she was then stable enough to be transferred to a general surgical ward.

She had experienced multiple laparotomies and developed intra-abdominal collections and multiple abdominal fistulae.

The fistulas exudate pancreatic fluid, purulent fluid and faeces.

Niki's fistula care has been managed mainly by ward nurses and I have been asked to review her from time to time for skin care management.

wound and fistula management

The three fistula I have reviewed are located on the L) side of Niki's abdomen.

- (1) the proximal fistula (upper) exudates straw/purulent fluid
- (2) the middle fistula exudates faeces
- (3) the distal fistula (lower) exudates faeces, mixed with straw/purulent fluid

wound and fistula management





wound and fistula management

- (1) treated with silver nitrate as hypergranulated.
 - cavilon barrier film
 - small adapt seal
 - Dansac Infant pouch
- (2) treated with silver nitrate as hypergranulated.
 - cavilon barrier film
 - small adapt seal
 - Dansac Infant pouch
- (3) fistula is flush with no hypergranulation tissue – however the area is very painful for Niki.
 - cavilon barrier film & adapt powder
 - a small adapt seal & Dansac Infant pouch



wound and fistula management

Suzie

Divided colostomy

I met baby (Suzie) at four weeks of age in PICU in February. She was born with a congenital diaphragmatic hernia and developed complications along the way.

On 25/01/18 - Suzie underwent repair of her diaphragmatic hernia – the hernia contained all of the small bowel and large intestine, there was a contained perforation of the distal transverse colon which was resected with formation of a divided colostomy.

The colostomy and mucous fistula sit side by side – but it doesn't always make it any easier managing the two stomas and maintaining a leak free appliance!

wound and fistula management



wound and fistula management

Pouching Suzie's stomas:

- colostomy stoma protrudes and m/f stoma is flush.
- surgical incision line on abdomen
- irrigated and cleaned both stomas and surrounding skin with warm NaCl.
- cavilon barrier film wipe applied.
- a small amount of adapt powder applied into the base of dehisced abdominal wound.
- a light packing of aquacel applied to the wound and secured with a strip of comfeel.
- small slim adapt seal around both stomas – nurses had been dressing the m/f/stoma.
- applied a Hollister Newborn pouching system – bordered the base with strips of comfeel.

wound and fistula management





