

Wound and Fistula Management

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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.

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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

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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.

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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





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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

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Picture framing a wound



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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

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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.

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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

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- (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



HOSPITAL

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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!

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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.

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