


Intestinal Rehabilitation and Managing the Difficult Abdomen

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Disclosures


Zealand Pharma – investigator and consultant
Takeda – investigator and consultant
VectivBio – investigator
The Insides Company – investigator




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What is Intestinal Failure?

Inability to maintain nutrition and/or hydration solely with your own intestines.



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Not enough bowel
Catastrophic or gradual

or


Enough bowel, but doesn't work properly

4

24048 patients with intestinal failure

Failure in the USA based on

Generally, management of short bowel patients across the US is done poorly



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What can we do in intestinal rehab?

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At the end of the day...

The most children and adults having the best life they can



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EMPTY YOUR MIND.

BE FORMLESS. **LIKE WATER.**
SHAPELESS.

YOU PUT WATER INTO A CUP.
IT BECOMES THE CUP.

YOU PUT WATER INTO A BOTTLE.
IT BECOMES THE BOTTLE.

YOU PUT WATER INTO A TEAPOT.
IT BECOMES THE TEAPOT.

WATER CAN **FLOW**
OR IT CAN **CRASH.**

BE WATER, MY FRIEND.



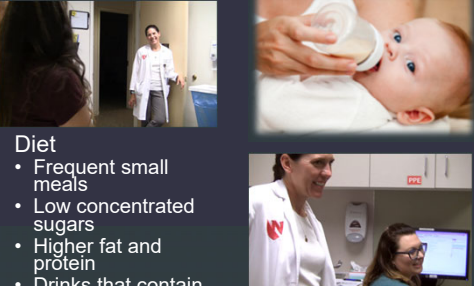
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How do we do?

- Most babies with 10-15cm of small intestine and 2/3 of their large intestine will come off TPN
- Most adults with 30-40cm of small intestine and 75% of their large intestine will come off TPN
- Most adults with 100cm of small intestine and no colon will come off TPN
- Virtually every patient who comes to a specialized center will have a significant improvement in quality of life and a significant drop in intravenous support




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Diet

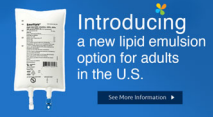
- Frequent small meals
- Low concentrated sugars
- Higher fat and protein
- Drinks that contain solute
 - G2, Powerade Zero, ORS



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TPN Management

- Minimizing toxicity
- Maximizing time off
- Preventing dehydration




Introducing a new lipid emulsion option for adults in the U.S.

[See More Information](#)

SMOFLipid


As much as possible we want TPN to fade into the background of people's daily lives




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Central Line Management

- Don't pull lines
- Constantly stress perfection in line care
- Locks (ethanol, antibiotic, tauroidline, EDTA)



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20 children on 4% EDTA locks
 Pre-EDTA **2.7 infections** per 1000 catheter days
 Post-EDTA **0 infections** per 1000 catheter days
 (followed for 1 year)

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Medications

- To slow you down
 - loperamide, diphenoxylate
- To speed you up
 - erythromycin, metoclopramide, domperidone
- To make stool less toxic
 - cholestyramine, PPI/H2 blocker
- To modify bacteria
 - antibiotics, probiotics
- To help you absorb better

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with
 Teduglutide
 Glepaglutide
 Apraglutide

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What are GLP-2 analogues?

- Changes made to a protein that we all make that control how the lining in the intestine grows (amongst other things)
- Approved drug is teduglutide (Gattex)
 - Generally very well tolerated
 - Leads to a reduction in IV support in most children and adults treated with it.
- If approved, newer versions will be given once or twice weekly and likely will have the same benefits



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Cases



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32yo man transferred from Texas

- Bad pancreatic disease, multiple intestinal fistulas
- In hospital for 2 years, NPO, cannot gain weight, cannot walk



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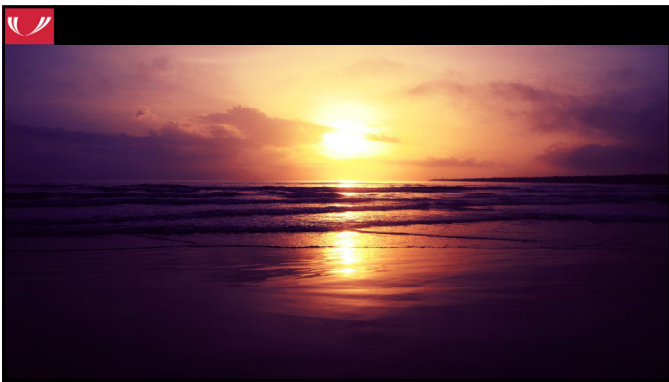
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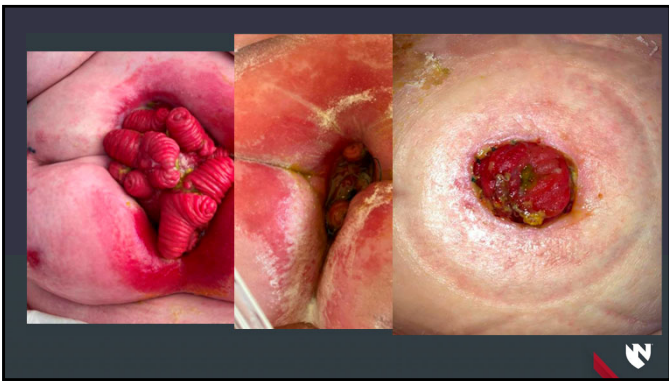
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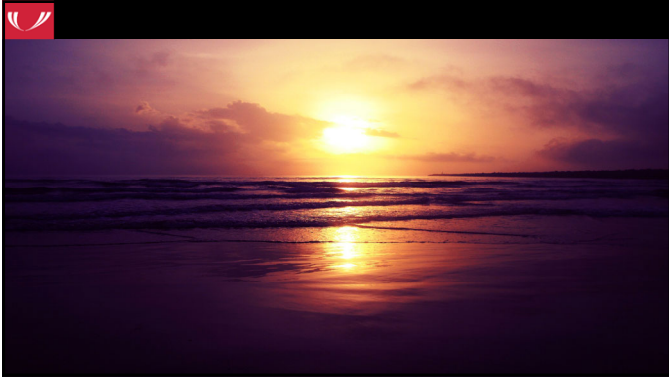
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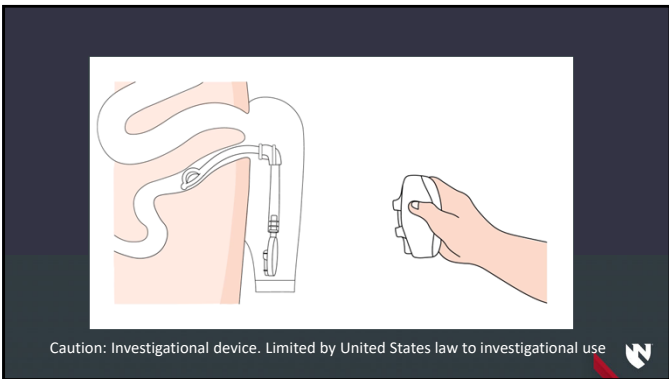
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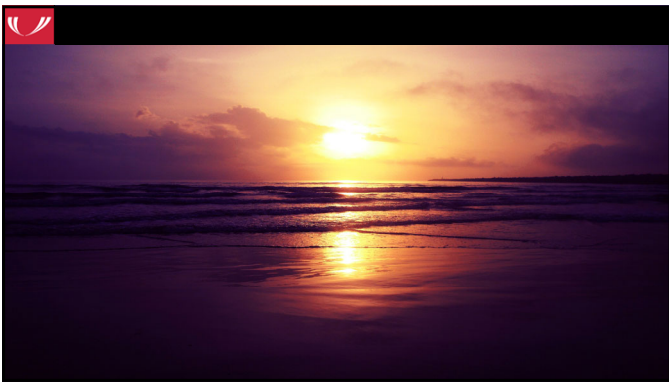
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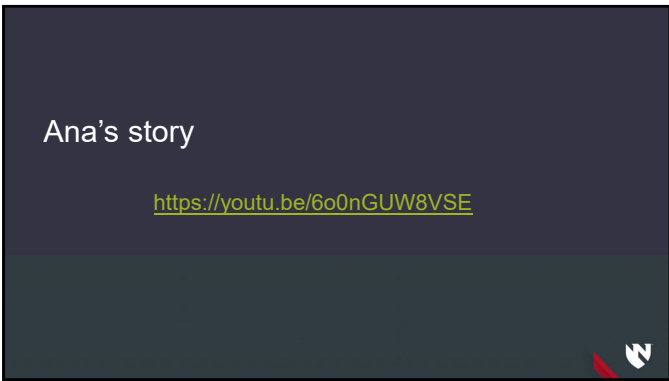
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“ . . . A team. Literally a team . . . ”



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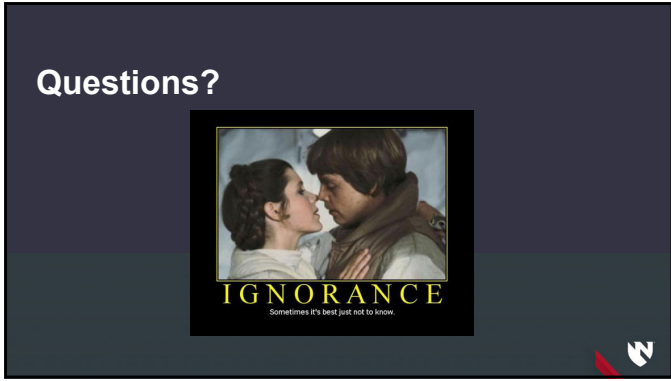


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When you have the chance to influence the care of a patient on TPN for greater than 3 months, empower them to get care at a center of excellence with a defined and strong intestinal failure program



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