



The Lennard-Jones
Intestinal Failure Unit



Drug Management

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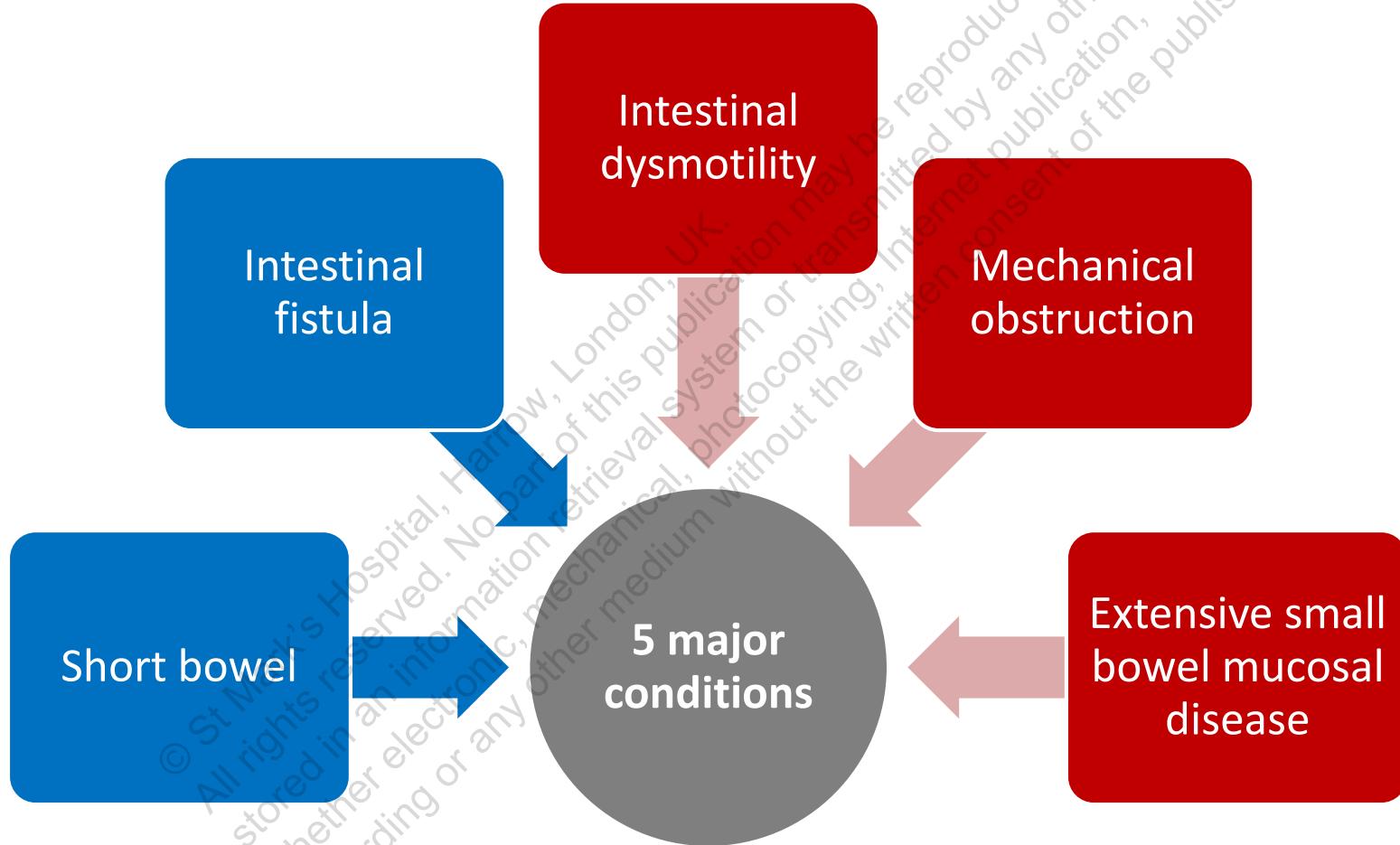
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Objectives

- Holistic approach
 - ▣ Underlying conditions
- Treatments of clinical problems seen in short bowel syndrome
 - ▣ High output stoma
 - MHRA drug safety update: Loperamide
 - ▣ Hypomagnesaemia
- Polypharmacy
 - ▣ Things to consider when prescribing short bowel syndrome and intestinal failure
- Horizon scanning

Holistic approach

IF: pathophysiological classification



Treatments of clinical problems seen in short bowel syndrome: Aims of treatment



Prevention of
thirst &
dehydration



Stomal output
 $<2\text{L/day}$
or
manageable
diarrhoea



Prevention of
electrolyte
deficiencies



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Treatment: High Output State

Drink little hypotonic fluid	Maximum 1L/day
Drink a glucose-saline solution	Maximum 1L/day

Drug therapy	Antimotility	Loperamide (up to 40mg QDS)
	Antisecretory	Codeine phosphate (up to 60mg QDS) Omeprazole (40mg BD) ?Octreotide (50µg BD)
Magnesium supplements		Magnesium oxide Vitamin D
Nutrition		Low residue diet

MHRA drug safety update

Loperamide September 2017

Reports of cardiac events:

- QT prolongation
- Torsades de pointes
- Cardiac arrest

Doses:

- High or very high doses

Indication:

- As a drug of abuse
- Self-treatment of opioid withdrawal

MHRA drug safety update

The data summary and recommendations

Type of evidence	Case reports
Nation of origin	America
Number of patients	20
Dose range	70- 800mg (35- 400 tablets) daily
GI anatomy and transit	Normal

Check ECG and measure QT interval:

- All patients on loperamide
- High dose

Review current medication

- Others that cause QT interval prolongation

Review co-morbidities

- Cardiology

Hypomagnesaemia

LNUH policy

First line

Oral preparation	Magnesium content	Suggested dose
Mg aspartate 6.5g (Magnaspionate®) sachets *renal impairment contraindicated in eGFR < 30 ml/min/1.73m ²	10 mmol/sachet (243 mg)	1 sachet dissolved in 50-200mL water, tea or orange juice once or twice daily

Second line

reserved for patients who cannot tolerate the magnesium aspartate preparation or for

high output stoma patients or for those patients who require a lower dose than 10mmol

Oral preparation	Magnesium content	Suggested dose
1 st line: Mg Glycerophosphate Chewable Tablets (unlicensed)	4mmol per tablet	1 – 2 tablets two or three times a day
2 nd line: Mg oxide 160mg capsules (unlicensed)	4mmol per capsule	1-2 capsules two or three times a day
3 rd line: Mg Glycerophosphate Suspension (unlicensed)	5mmol per 5mL	5 – 10mL two or three times a day

IV: Mg deplete despite oral supplementation

IM: painful

Drugs used in IF

Recap

- St Mark's solution
- Diarolyte
- Glucodrate

Oral
rehydration
solutions

- Proton pump
inhibitors
- Octreotide

Antisecretory

- Magnesium

Electrolytes

Antimotility

- Loperamide
- Codeine
phosphate

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Polypharmacy

Other therapies seen regularly in IF

- Antiemetic
 - ▣ IV cyclizine – addictive
- Analgesia
 - ▣ Weaning opioids
 - Buccal – subcutaneous – intravenous
- Drugs used in diabetes
 - ▣ Oral Vs subcutaneous
 - ▣ Timings in relation to PN or EN
- Antibiotics
 - ▣ CVC infections
 - ▣ Small intestinal bacterial overgrowth (SIBO)
 - ▣ Oral to intravenous switches

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Considerations when prescribing

- Drug interactions
 - ▣ Use BNF to check
- Drug nutrient interactions
 - ▣ Timings
- Allergies
 - ▣ Nature of
 - ▣ Intolerances ?
- Route of administration
 - ▣ Reduce absorption
- Supply and review post discharge
 - ▣ GP, Hospital or HPN framework
 - ▣ Cost

Administration

Don't crush and mix all
medication together before
administration via an enteral
feeding tube

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Horizon scanning

- Teduglutide
 - ▣ Glucagon-like peptide 2 (GLP-2)
 - ▣ NICE TA: Short bowel syndrome - teduglutide
 - ▣ Expected publication date: 25 April 2018
- Liraglutide
 - ▣ GLP-1 agonist
- Magnesium spray

Conclusion

