23.6.4 MOOD DISORDERS

See section 15.3: Mood disorders.

23.6.5 SEIZURES

See section 14.4: Epilepsy.

23.6.6 INTRACRANIAL PRESSURE MANAGEMENT

See section 14.12.2: Brain oedema due to traumatic injury.

23.7 GASTRO-INTESTINAL SUPPORT

23.7.1 NUTRITION

DESCRIPTION

Critically ill patients have increased nutritional requirements due to an increased metabolic rate. Therefore, they require careful management of their nutritional requirements.

GENERAL MEASURES

» Commence nutritional support as soon as possible.
» Oral, enteral or parenteral route should be initiated once it is safe to reduce the risk of adverse events associated with the overuse of enteral/parenteral feeding.
» Consider choice of feed to meet patient-specific fluid, caloric, and protein requirements.

REFERRAL

» Consult dietitian as appropriate and refer to the National Department of Health Clinical Nutrition Guidelines (https://criticalpoint.co.za/wp-content/uploads/2016/10/DOH-enteral-nutrition-guidelines.pdf and https://criticalpoint.co.za/wp-content/uploads/2017/09/DOHParenteral-nutrition-guidelines.pdf).

See section 12.13.1: Nutritional support

23.7.2 STRESS ULCER PROPHYLAXIS

K25.0/K25.1/K25.2/K25.3/K25.9/K26.0/K26.1/K26.2/K26.3/K26.9/K27.0/K27.1/K27.2/K27.3/K27.9

DESCRIPTION

Stress-related mucosal disease is an acute, erosive gastritis comprising conditions that range from stress-related injury to stress ulcers. Stress-related injury is due to superficial mucosal damage that manifests as erosions, while stress ulcers are due to deep, focal mucosal damage penetrating the submucosa. Stress ulcers occur in up to 9% of all patients admitted to critical care units, and the risk is higher in those that do not receive stress ulcer prophylaxis. Stress ulcers can cause clinically important gastrointestinal bleeding and lead to hemodynamic instability, an increased need for red blood cell transfusions, increased length of stay in the ICU, as well as increased mortality.

LoE:IVb[xxxix]

GENERAL MEASURES

» Initiate oral or enteral feeding as soon as it is safe to do so.

MEDICINE TRATMENT

- Pantoprazole, IV, 40mg daily.
  - Stop stress ulcer prophylaxis once the patient is tolerating enteral feeds as prolonged PPI use increases the risk of hospital acquired pneumonia.

LoE:IIb[xl]

23.7.3 REGURGITATION AND ASPIRATION

K21.0/K21.9/J69.0

DESCRIPTION

Gastroesophageal reflux is common in patients treated in critical care units. Contributing factors include mechanical ventilation causing elevated intrathoracic pressure, reduced/absent lower oesophageal sphincter tone, and GI dysmotility. Gastroesophageal reflux is an important risk factor for aspiration, pneumonia, and acute lung injury.

GENERAL MEASURES

» Avoid regurgitation of gastric contents by decreasing intragastric pressure.
» Nurse patient at 30-45 degrees with the head up.
» Obtain Chest X-ray to confirm suspected aspiration.
» Use a nasogastric tube and confirm placement with x-ray imaging and/or pH analysis of aspirate.
» Maintain oropharyngeal hygiene.

LoE:IVb[xli]

» If aspiration suspected, suction oropharynx and endotracheal tube thoroughly.

23.7.4 DIARRHOEA

A09.0/K52.8/K52.9

DESCRIPTION

Up to 62% of critically ill patients experience at least one episode of diarrhoea during their admission. Risk factors include the use of enteral nutrition (particularly those with high osmolarity), duration of antimicrobial use, and the use of suppositories. Diarrhoea increases the risk of complications including renal dysfunction, dehydration, electrolyte disturbance, as well as impairment of dermal integrity. There is also evidence that the development of GI problems is associated with worse outcome in critically ill patients.

LoE:IVb[xlii]

GENERAL MEASURES

» Send stool specimens to evaluate potential causes.

Consider Clostridium (Clostridioides) difficile diarrhoea

» (See section 1.3.4: Clostridium difficile diarrhoea) and feed-related diarrhoea as potential causes.

MEDICINE TREATMENT

» Treatment will depend on the identified aetiology.
» See section 1.3: Diarrhoea for specific treatment.

23.7.5 LIVER SUPPORT

See section 1.2.2: Liver Failure, Acute.

REFERRAL

Consult specialist unit to evaluate suitability for liver transplantation.

23.7.6. ACUTE SEVERE PANCREATITIS

K85.0/K85.1/K85.2/K85.3/K85.8/K85.9

DESCRIPTION

Approximately 10–30% of patients with acute pancreatitis develop a severe form that requires management in a critical care unit. Acute severe pancreatitis is a life-threatening disease with an in-hospital mortality rate of up to 15%. The severity of acute pancreatitis is determined by the development of organ failure for >48 hours and local complications including infected (peri-)

pancreatic necrosis, haemorrhagic or systemic complications, and infective pancreatitis.

LoE:IVb[xliii]

GENERAL MEASURES

For general management of acute pancreatitis, see Section 1.16: Pancreatitis, Acute.

Measures specific to critical care management

» Provide supportive therapy for organ failure, including fluid support (see section 23.3.7.6: Fluid therapy for shock).
» Address the underlying cause e.g. gall stones.
» Treat sepsis (see section 23.10: Sepsis in ICU).

REFERRAL

Refer for surgical consultation for complications including:

» Pancreatic abscess.
» Pancreatic necrosis.
» Pancreatic pseudocyst.
» Abdominal compartment syndrome.

23.7.7 ACUTE CHOLECYSTITIS

K81.0

DESCRIPTION

Acute acalculous cholecystitis is a specific complication of critical illness that warrants organ support, antimicrobial therapy, and consultation for surgical intervention.

LoE:IVb[xliv]

GENERAL MEASURES

See section 1.27: Cholecystitis, acute and cholangitis, acute.

REFERRAL

All patients for surgical consultation and intervention.

23.7.8 ABDOMINAL COMPARTMENT SYNDROME

R19.8

DESCRIPTION

Abdominal compartment syndrome is defined as the presence of intra-abdominal hypertension, with sustained intra-abdominal pressures exceeding 20 mmHg, along with evidence of new-onset organ dysfunction. Abdominal compartment syndrome can be classified as primary, i.e. due to direct injury

of the abdomen or pelvic region, or secondary, i.e. referred pressure from other compartments. Mechanisms of causes resulting in abdominal compartment syndrome can be broadly categorised into decreased abdominal wall compliance, increased intraluminal contents, collection of contents in the abdominal cavity, and capillary leak and fluid resuscitation. Abdominal compartment syndrome is associated with severe critical illness and multi-organ failure and has a high risk of mortality (40-100%) which necessitates urgent intervention.

LoE:IVb[xlv]

GENERAL MEASURES

Relieve intra-abdominal pressure via:

- nasogastric tube
- urinary catheter
- drainage of intra-abdominal collections
- appropriate positioning
- sedation
- analgesia
- muscle relaxation (if ventilated)
- surgical decompression

REFERRAL

» Consider surgical consultation for decompression.