

Bariatric Surgery Post Operative Emergencies

Subject:	Emergencies in Bariatric Surgery Guidelines
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Policy Executive Owner:	Clinical Director for Surgery
Designation of Author:	Mr Ali Alhamdani, Mr P Sufi, Mr M Howlader, Mr S Ramar, Dr Michael Steward
Name of Assurance Committee:	Clinical Guideline Committee
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Target Audience:	All clinical staff dealing
Key Words:	Bariatric surgery, Obesity surgery Emergencies

Version Control Sheet

Version	Date	Author	Status	Comment
1.0	Dec 2013	Mr Ali Alhamdani Mr P Sufi Mr M Howlader Mr S Ramar Dr Michael Steward	New	

Abbreviations contained within this guideline

ED	Emergency department
PR	Per rectum
CT	Computed tomography
CXR	chest x-ray
V/Q	ventilation/ perfusion (V/Q) scan
CTPA	Computed tomography of pulmonary artery
AXR	abdominal x-ray
CTA	Computed tomography angiography

➤ **Criteria for use**

This guideline will be applicable for all patients after bariatric surgery presenting at Whittington Hospital with emergency symptoms.

➤ **Background/ introduction**

Obesity Surgery is on the increase in the UK and The Whittington Hospital is one of the bariatric centres. Post operative patients often present to the Emergency Department (ED) and may suffer adverse consequences in the absence of proper management. Bariatric surgery patients are difficult to assess, they might look misleadingly well and the management is often complex – hence these guidelines are put forward to streamline the management of these patients presenting to ED. This guideline is based on other national and international guidelines.

➤ **Inclusion criteria**

Inclusion criteria

1. All bariatric patients presenting to ED at Whittington Hospital with an emergency clinical presentation.
2. All bariatric patients transferred to Whittington Hospital from a different hospital
3. All bariatric patients admitted from outpatient clinics as an emergency

SYMPTOMS after bariatric surgery which constitute an emergency:

1. Nausea and Vomiting > 4 hours
2. Abdominal pain > 4 hours
3. Haematemesis or fresh PR bleeding or melaena
4. Dysphagia

SIGNS after bariatric surgery which constitute an emergency:

1. Tachycardia >120 beat per minute (bpm) > 2 hours
2. Fever >38° C
3. Hypotension
4. Hypoxia
5. Tachypnea
6. Decreased urine output

➤ Clinical management

If the on-call surgeon is not a bariatric surgeon then discuss with the consultant surgeon who operated on the patient. If the patient was operated at another hospital, then discuss with any bariatric consultant surgeon at Whittington.

Initial immediate investigation:

Blood tests:

- Full blood count
- urea and electrolytes
- liver function test
- Amylase
- C reactive protein
- Arterial blood gas

Imaging Options:

- CXR and AXR
- Oral (Omnipaque) and intravenous contrast Computed tomography (CT) abdomen and pelvis +/-
- Contrast (Omnipaque) swallow/follow through
- Consider CXR and ventilation/ perfusion (V/Q) scan/ Computed tomography of pulmonary artery (CTPA) after exclusion of intra-abdominal pathology after discussion with the bariatric surgeon

Complications

1. Intra abdominal bleeding:

Patients will present within 2 weeks of surgery with the following:

- Bright red blood oral or rectal, melaena, tachycardia, hypotension
- <48 hours after surgery indicates potential bleed from staple line
- >48 hours after surgery indicates potential marginal ulcer haemorrhage

Bleeding into gastric remnant is usually concealed and lead to gastric remnant distension and subsequently clot can cause obstruction at jejunojejunostomy.

Emergency assessment and treatment

1. Stop anticoagulant, if applicable.
2. Cross match blood, may need fresh frozen plasma, platelets
3. Check vital signs and urine output
4. Surgery/ Computed tomography angiography (CTA) may be required if hypotension or persistent tachycardia >120bpm, despite blood transfusion

5. Urgent surgical referral and discuss with bariatric surgeon
6. Discuss early with anaesthetics if return to theatre may be necessary
7. Refer early for Outreach or critical care review depending on clinical condition.

2. Leaks and sepsis post gastric bypass or sleeve gastrectomy

Patients will present within 2 weeks of surgery with the following:

- Persistent and progressive tachycardia >120 bpm
- Epigastric on swallowing

Emergency assessment and treatment:

1. Take bloods and perform a septic screen (including blood culture) (link to sepsis bundle guidelines).
2. Commence intravenous antibiotics in accordance with the microbiology guidelines
3. Urgent Oral (omnipaque) and IV contrast abdominal and pelvic CT
4. Urgent surgical referral and discuss with bariatric surgeon
5. Discuss early with anaesthetics if return to theatre may be necessary
6. Refer early for Outreach or critical care review depending on clinical condition.

3. Vomiting with gastric banding:

Usually due to over-restriction or slippage.

Patients can present any time after surgery, **even years later**, with the following:

- Vomiting - persistent
- Pain - epigastric
- Coughing
- Choking, especially on lying down
- Dehydration

Emergency assessment and treatment:

1. Take bloods.
2. Commence intravenous fluids (if patient is dehydrated).
3. AXR
4. Consider oral Contrast (Omnipaque) swallow +/- Oral contrast (Omnipaque) CT abdomen
5. Urgent surgical referral
6. Discuss with bariatric surgeon to deflate the band – surgically competent doctor should use Huber needle only
7. Discuss early with anaesthetics if return to theatre may be necessary
8. Refer early for Outreach or critical care review depending on clinical condition.

4. Intestinal obstruction post gastric bypass

Usually due to anastomotic oedema (within 1week) or internal hernia (any time after surgery)

Usually presents with abdominal pain +/- vomiting

Since the patient had a recent gastric bypass there is a high risk of perforation or leak with intestinal obstruction

Emergency assessment and treatment:

1. Urgent Oral (Omnipaque) and IV contrast abdominal and pelvic CT
2. Discuss with bariatric surgeon
3. Discuss early with anaesthetics if return to theatre may be necessary
4. Refer early for Outreach or critical care review depending on clinical condition.
5. NG tube should not be placed in emergency department or by surgical teams without consulting bariatric surgeon responsible for patient care.

IMPORTANT:

If the NG placement planned there should be no more than 2 trials of insertion. After two failed attempts, this **must** be escalated to the bariatric consultant

5. Pulmonary embolism

Emergency assessment and treatment:

- Tachypnea +/- chest pain
- CXR and arterial blood gas
- If CXR normal consider V/Q scan
- If CXR abnormal consider CTPA

➤ **Contacts (inside and outside the Trust including out-of-hours contacts)**

Bariatric Surgeons contact information:

- Mr P Sufi 07957394662
- Mr M Howlader 0785522614
- Mr A Alhamdani 07811948203


- Mr S Ramar 07800806883

Bariatric Helpline (9am-4pm):


- 020 7288 3071

➤ **References (evidence upon which the guideline is based)**

Emergency department management of bariatric patients: British Obesity & Metabolic Surgery Society Guideline: <http://www.ifso.com/pdfs/bomss-emergency-room-poster.pdf>; 2013



EMERGENCY DEPARTMENT MANAGEMENT OF BARIATRIC PATIENTS



OPERATION TYPES
GASTRIC BAND , GASTRIC BYPASS, SLEEVE GASTRECTOMY

PRESENTATION	THIS MAY SIGNIFY	ACTION
TOTAL DYSPHAGIA IN BAND PATIENT	ACUTE BAND SLIPPAGE (HERNIATION) - MAY REQUIRE EMERGENCY SURGERY FOR GASTRIC ISCHAEMIA EVEN IN APPARENTLY WELL PATIENT	A
GIBBLEED	ANASTOMOTIC BLEED, MARGINAL ULCER. MAY NOT BE ACCESSIBLE AT ENDOSCOPY POST BYPASS PROCEDURES - MAY NEED SURGERY	A
INTESTINAL OBSTRUCTION	ANASTOMOTIC STRICTURE, INTERNAL HERNIA OR PORT SITE HERNIA	A
CHEST PAIN, TACHYCARDIA, BREATHLESSNESS	PULMONARY EMBOLUS, MYOCARDIAL INFARCTION, GASTRIC POUCH PROBLEMS, ANASTOMOTIC LEAK	B
ABDOMINAL PAIN	SUBACUTE OBSTRUCTION FROM INTERNAL HERNIA, ANASTOMOTIC LEAK	B
REFLUX SYMPTOMS, NO DYSPHAGIA TO FLUIDS	BAND SLIP, GASTROJEJUNAL STENOSIS	C
PORT SITE INFECTION IN BAND PATIENT	GASTRIC BAND EROSION / INFECTED BAND	C

A

URGENT REFERRAL FOR BAND DEFLATION AND SURGERY IF APPROPRIATE

B



INITIAL INVESTIGATIONS AS APPROPRIATE. CT MAY BE IMPOSSIBLE OR MISLEADING. EARLY DISCUSSION WITH SURGICAL TEAM ADVISABLE

C


TREAT APPROPRIATELY, URGENT BARIATRIC APPOINTMENT

REMEMBER

- BARIATRIC PATIENTS HAVE NON-BARIATRIC PROBLEMS
- ABDOMINAL PERITONISM MAY BE LESS APPARENT IN OBESE PATIENTS
- DO **NOT** INSERT A NASOGASTRIC TUBE
- BASIC SURGICAL PRINCIPLES APPLY REGARDLESS OF PATIENT SIZE
- GASTRIC BYPASS PATIENTS - WITH PROLONGED VOMITING, THIAMINE DEFICIENCY MAY DEVELOP IN A FEW DAYS. PLEASE PRESCRIBE PABRINEX AND VITAMIN B COMPLEX TO PREVENT POTENTIALLY IRREVERSIBLE NEUROLOGICAL DEFICIT

AUTHORS: MONKHOUSE SJW, MORGAN JDJ, NORTON SA. POSTER DESIGN: BEARD LA



To be completed and attached to any procedural document when submitted to the appropriate committee for consideration and approval

		Yes/No	Comments
1.	Does the procedural document affect one group less or more favourably than another on the basis of:		
	• Race	No	
	• Ethnic origins (including gypsies and travellers)	No	
	• Nationality	No	
	• Gender	No	
	• Culture	No	
	• Religion or belief	No	
	• Sexual orientation including lesbian, gay and bisexual people	No	
	• Age	No	
	• Disability - learning disabilities, physical disability, sensory impairment and mental health problems	No	
2.	Is there any evidence that some groups are affected differently?	No	
3.	If you have identified potential discrimination, are any exceptions valid, legal and/or justifiable?	No	
4.	Is the impact of the procedural document likely to be negative?	No	
5.	If so can the impact be avoided?	N/A	
6.	What alternatives are there to achieving the procedural document without the impact?	N/A	
7.	Can we reduce the impact by taking different action?	N/A	

If you have identified a potential discriminatory impact of this procedural document, please refer it to the Director of Human Resources, together with any suggestions as to the action required to avoid/reduce this impact.

For advice in respect of answering the above questions, please contact the Director of Human Resources.

Checklist for the Review and Approval of Procedural Document

To be completed and attached to any procedural document when submitted to the relevant committee for consideration and approval.

	Title of document being reviewed:	Yes/No	Comments
1.	Title		
	Is the title clear and unambiguous?	Yes	
	Is it clear whether the document is a guideline, policy, protocol or standard?	Yes	
2.	Rationale		
	Are reasons for development of the document stated?	Yes	
3.	Development Process		
	Is it clear that the relevant people/groups have been involved in the development of the document?	Yes	
	Are people involved in the development?	Yes	
	Is there evidence of consultation with stakeholders and users?	Yes	
4.	Content		
	Is the objective of the document clear?	Yes	
	Is the target population clear and unambiguous?	Yes	
	Are the intended outcomes described?	Yes	
5.	Evidence Base		
	Are key references cited in full?	N/A	
	Are supporting documents referenced?	N/A	
6.	Approval		
	Does the document identify which committee/group will approve it?	Yes	
7.	Dissemination and Implementation		
	Is there an outline/plan to identify how this will be done?	Yes	

	Title of document being reviewed:	Yes/No	Comments
8.	Document Control		
	Does the document identify where it will be held?	Yes	
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	Are there measurable standards or KPIs to support the monitoring of compliance with and effectiveness of the document?	Yes	
	Is there a plan to review or audit compliance with the document?	Yes	
10.	Review Date		
	Is the review date identified?	Yes	
	Is the frequency of review identified? If so is it acceptable?	Yes	
11.	Overall Responsibility for the Document		
	Is it clear who will be responsible for co-ordinating the dissemination, implementation and review of the document?	Yes	

Executive Sponsor Approval			
If you approve the document, please sign and date it and forward to the author. Procedural documents will not be forwarded for ratification without Executive Sponsor Approval			
Name		Date	
Signature			
Relevant Committee Approval			
The Director of Nursing and Patient Experience's signature below confirms that this procedural document was ratified by the appropriate Governance Committee.			
Name		Date	
Signature			
Responsible Committee Approval – only applies to reviewed procedural documents with minor changes			
The Committee Chair's signature below confirms that this procedural document was ratified by the responsible Committee			
Name		Date	
Name of Committee		Name & role of Committee Chair	
Signature			

Tool to Develop Monitoring Arrangements for Policies and guidelines

What key element(s) need(s) monitoring as per local approved policy or guidance?	Who will lead on this aspect of monitoring? Name the lead and what is the role of the multidisciplinary team or others if any.	What tool will be used to monitor/check/observe/Assess/inspect/ authenticate that everything is working according to this key element from the approved policy?	How often is the need to monitor each element? How often is the need complete a report ? How often is the need to share the report?	What committee will the completed report go to?
Element to be monitored	Lead	Tool	Frequency	Reporting arrangements
<ul style="list-style-type: none"> ➤ Inclusion/ excusion ➤ Clinical management 	Mr Ali Alhamdani	We will be piloting ED adherence to the guideline for admitted patients	3 months for the piloting project	Bariatric MDT