Adjustable Gastric Band Management Practice Guidelines

This procedural document supersedes: PAT/T 47 v.2 – Adjustable Gastric Band Management – Practice Guidelines

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<table>
<thead>
<tr>
<th>Author/reviewer: (this version)</th>
<th>Katie Kirk - Clinical Nurse Specialist Bariatric Surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date written/revised:</td>
<td>June 2016</td>
</tr>
<tr>
<td>Approved by:</td>
<td>Policy Approval and Compliance Group (on behalf of the Patient Safety Review Group)</td>
</tr>
<tr>
<td>Date of approval:</td>
<td>21 September 2016</td>
</tr>
<tr>
<td>Date issued:</td>
<td>27 September 2016</td>
</tr>
<tr>
<td>Next review date:</td>
<td>June 2019</td>
</tr>
<tr>
<td>Target audience:</td>
<td>Trust wide - Medical, Nursing and Midwifery staff</td>
</tr>
</tbody>
</table>
Amendment Form

Please record brief details of the changes made alongside the next version number. If the procedural document has been reviewed without change, this information will still need to be recorded although the version number will remain the same.

<table>
<thead>
<tr>
<th>Version</th>
<th>Date Issued</th>
<th>Brief Summary of Changes</th>
<th>Author</th>
</tr>
</thead>
</table>
| Version 3 | 27 September 2016 | • Format style updated.  
• Introduction updated  
• Specialist Dietitian included in duties and responsibilities  
• Statement regarding radiological band adjustments updated  
• Training and support section updated to include specialist Dietitian  
• Adjustment guidelines for Apollo Lap-band AP included | K Kirk |
| Version 2 | 16 October 2013   | • Title change to ease search.  
• Format style updated.  
• Statement regarding fluid removal in pregnancy updated.  
• Dietary advice following band adjustment updated. | K Kirk |
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction</td>
</tr>
<tr>
<td>2</td>
<td>Purpose</td>
</tr>
<tr>
<td>3</td>
<td>Duties and Responsibilities</td>
</tr>
<tr>
<td>4</td>
<td>Procedure</td>
</tr>
<tr>
<td>5</td>
<td>Training/Support</td>
</tr>
<tr>
<td>6</td>
<td>Monitoring Compliance with the Procedural Document</td>
</tr>
<tr>
<td>7</td>
<td>Definitions</td>
</tr>
<tr>
<td>8</td>
<td>Equality Impact Assessment</td>
</tr>
<tr>
<td>9</td>
<td>Associated Trust Procedural Documents</td>
</tr>
<tr>
<td>10</td>
<td>References</td>
</tr>
</tbody>
</table>

### Appendices

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix 1</td>
<td>Adjustment guidelines</td>
</tr>
<tr>
<td>Appendix 2</td>
<td>Equality Impact Assessment Form</td>
</tr>
</tbody>
</table>
1. INTRODUCTION

In 2005 the Government requested Foresight carry out a review investigating obesity in Britain. One of the reports’ most significant findings was that most adults in the UK are already overweight and by 2050 it is estimated that 60% of men and 50% of women could be clinically obese (Foresight, 2007).

The National Institute for health and Clinical Excellence (NICE) published guidance on how this could be managed in its document titled ‘Obesity: identification, assessment and management’. One recommended treatment option for adults with severe obesity is bariatric surgery, although the patient must fulfil the set criteria stipulated by NICE (2014).

Bariatric surgery offers a long-term solution for the problem of severe obesity with the major benefits of sustained weight loss and the improvement and/or resolution of numerous obesity related illnesses. The Adjustable Gastric Band is one type of surgery recommended, it works by decreasing appetite and creating satiety (a feeling that you are not hungry) with only a small amount of food. The gastric band is a ring placed around the top part of the stomach. There is almost no stomach above the band. When eating, a person will get a sense of fullness from a small amount of food. This feeling of satiety (a feeling that you are not hungry) is induced by the band pressing onto the surface of the stomach and stimulating the nerves leading to the brain. The band is attached to tubing that is connected to a port. This port is attached to the muscles under the skin. Fluid can be added (by injection) to the port to increase and decrease the sense of satiety. The key feature of the adjustable gastric band is its adjustability and its success directly depends upon this (Ponce, 2007).

After the surgery, food will follow the normal route passing through the band into the larger stomach.

2. PURPOSE

The aim of these guidelines is to provide a framework for the clinical adjustments of the gastric band in line with best practice.

The gastric band is a surgical option to assist in the treatment of morbid obesity.

The objectives are:

- To ensure safe and effective clinical adjustments to the gastric band.
- To ensure infection prevention and control measures are observed throughout adjustments.
- To sustain the safety and comfort of the patient.
- To ensure that the level of adjustment is sufficient to achieve a prolonged sensation of satiety.
To assist with a steady and progressive weight loss (Favretti, O’Brien and Dixon, 2002 and Thomusch and Karcz, 2012).

3. DUTIES AND RESPONSIBILITIES

- **Matrons**: are accountable for safeguarding patients through high quality and effective practice. They are responsible for ensuring implementation within their area by ensuring appropriate care, education and equipment is provided.

- **Clinical Nurse Specialist and Specialist Dietitian**: (for bariatric surgery) are responsible for keeping an ongoing record of all patients within the service who have had gastric band surgery. The CNS and Sp Dietitian performs band adjustments in both radiology and clinic settings, adhering to best practice at all times. The CNS has a role in educating medical and nursing staff about the adjustable gastric band and its management.

- **Wards and Department Managers**: are responsible for the care and appropriate placement of the bariatric patient whilst in their area. They are also responsible for the equipment needs of an individual patient.

- **Lead Nurse Practitioners/Surgical Nurse Practitioners**: The lead nurse practitioner is responsible for identifying surgical nurse practitioners working in an environment where there is a need for emergency gastric band deflation. Before deemed competent at removing fluid from the gastric band the practitioner must complete the LCAT training package ‘removal of fluid from the adjustable gastric band’.

- **Consultant Medical Staff**: The named Consultant leads the management plan for the patients care.

- **Site Co-ordination Teams and Bed Managers**: are responsible for ensuring patients are placed in accordance with these guidelines, and for escalating any situations where safe placement cannot be achieved.

4. PROCEDURE

**General guidance**

Clinical adjustments involve making adjustment decisions on the basis of weight loss, appetite, restriction and symptoms.

**Indication for adding fluid to the gastric band device:**

- Inadequate weight loss
- Rapid loss of satiety after meals
- Increased volume of meals
- Hunger between meal
Adjustment not required:

- Adequate rate of weight loss
- Eating a reasonable range of food
- No negative symptoms or complications

Indication for removal of fluid from the gastric band device:

- Vomiting, heartburn, reflux into mouth
- Coughing spells, wheezing and choking, especially at night
- Difficulty coping with broad range of food
- Maladaptive eating behaviour

(Favretti, O’Brien and Dixon, 2002, Kirchmayr et al., 2004 and Ponce 2007)

For adjustment guide see Appendix 1

- Prior to performing a band adjustment the practitioner must gain consent from the patient (Policy for consent to examination and treatment - PAT/PA 2).
- Always use a non-coring needle e.g., Huber needle or Braun Surecan needle (Schauer, Schirmer and Brethauer, 2007 and Thomusch and Karcz 2012).
- Local anaesthetic is not necessary (Favretti, O’Brien and Dixon, 2002).
- An X-ray may be required to localise and mark the port.
- The maximum recommended amount of fluid that a gastric band accommodates depends on the band type.
- The band should be deflated during the presence of acute or serious illness or a need for major surgery (Ponce 2007).
- Following band adjustment the patient must drink a glass of water before leaving the clinic to ensure that they do not have outlet obstruction.
- If fluid is added to the band, advise the patient to stay on fluids only, for two days post band adjustment, pureed diet for a further day, progressing to solid food by day four.
- Radiological adjustment is required for the first band adjustment, which involves making a decision that also incorporates the additional information from a barium swallow examination. Radiological adjustment are also undertaken when the practitioner requires the extra visual support for a band adjustment, this is seen as ‘gold standard’ practice (Thomusch and Karcz 2012).
4.1 Equipment for band adjustment

- Trolley
- Non-coring needle
- Drawing up needle
- 10ml syringe x2
- Sterile normal saline
- 2% chlorhexidine in 70% Isopropyl alcohol swabs
- Clean examining gloves (sterile gloves not required)
- Sterile gauze swabs
- Sharps bin

4.2 The Procedure

- Wash hands with soap and water and dry thoroughly.
- Clean trolley using detergent/disinfectant agent i.e. Difficil S.
- Ensure all equipment is gathered and placed on bottom shelf of trolley.
- Wash hands and don apron.
- Position patient supine on the examination couch with abdomen exposed.
- Palpate the port site (usually fixed securely on the surface of the anterior rectus sheath).
- Clean site with 2% chlorhexidine in 70% Isopropyl alcohol swab for 30 seconds and allow it to dry for 30 seconds.
- Clean hands using alcohol gel.
- Apply gloves – sterile not necessary.
- **If adding fluid to the band:** use syringe and drawing up needle to draw up required normal saline solution, detach and dispose of needle in sharps bin.
- Attach non-coring needle to 10ml syringe and remove needle guard.
- Anchor port between two fingers.
- Enter port through the skin with the non-coring needle at 90 degrees. Stop when you feel the metal of the port scratch against the tip of the needle.
- If fluid already in the band aspirate into syringe (**If just for band deflation, remove the desired amount of fluid and remove the needle and syringe**).
- If for band inflation, aspirate band fully then refill adding the required extra solution (normal saline)
- Remove needle and syringe, dispose of in sharps bin.
- Wipe site with gauze swab if necessary.
- Remove gloves, apron and wash hands with soap and water.
- Record the procedure in the patients notes, documenting the amount of solution removed and solution introduced.
- Ask patient to drink a cup of water to assess tolerance.
- Record the procedure in the patients notes, documenting the amount of solution removed and solution introduced.
• Dictate letter to the patients GP informing them of the consultation and band adjustment.

5. TRAINING/ SUPPORT

The Clinical Nurse Specialist and Specialist Dietitian for Bariatric surgery will perform regular band adjustments both in the radiological and clinical setting. Practitioners will attend role specific training session every three years on the management of the adjustable gastric band.

• Medical and nursing staff attending education sessions relating to the management of the gastric band will have attendance recorded and monitored by the Clinical Nurse Specialist on the OLM system.

• Surgical nurse practitioners trained on the removal of fluid from the gastric band will complete the LCAT training package and undergo annual training there-after.

• Supervisor must be a competent practitioner (GMC, 2013; NMC, 2009).

6. MONITORING COMPLIANCE WITH THE PROCEDURAL DOCUMENT

<table>
<thead>
<tr>
<th>What is being Monitored</th>
<th>Who will carry out the Monitoring</th>
<th>How often</th>
<th>How Reviewed/ Where Reported to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adverse incidents</td>
<td>Bariatric MDT</td>
<td>Bi-monthly</td>
<td>At bi-monthly service development meetings, outcomes disseminated by Nurse specialist and Dietitian. Documented in the meeting minutes. Reported on the Trust’s DATIX incident reporting system.</td>
</tr>
<tr>
<td>International guidance reviewed</td>
<td>Clinical Nurse Specialist</td>
<td>Bi-monthly</td>
<td>At bi-monthly service development meetings, outcomes disseminated by Nurse specialist and Dietitian. Documented in the meeting minutes.</td>
</tr>
</tbody>
</table>

Page 8 of 14
7. DEFINITIONS

**Bariatric** - A branch of medicine that deals with the control and treatment of obesity and allied diseases.

**SAGB** - Swedish Adjustable Gastric Band.

**Obesity** - The condition of being obese; increased body weight caused by excessive accumulation of fat.

8. EQUALITY IMPACT ASSESSMENT

An Equality Impact Assessment (EIA) has been conducted on this procedural document in line with the principles of the Equality Analysis Policy (CORP/EMP 27) and the Fair Treatment For All Policy (CORP/EMP 4).

The purpose of the EIA is to minimise and if possible remove any disproportionate impact on employees on the grounds of race, sex, disability, age, sexual orientation or religious belief. No detriment was identified. (See Appendix 2).

9. ASSOCIATED TRUST PROCEDURAL DOCUMENTS

**PAT/IC 5**: Hand Hygiene Policy: Doncaster and Bassetlaw NHSF Trust

**PAT/IC 8**: Safe use and Disposal of Sharps Policy: Doncaster and Bassetlaw NHSF Trust

**PAT/IC 14**: Management of Inoculation Injuries: Doncaster and Bassetlaw NHSF Trust

**PAT/IC 18**: Spillages of Blood and Other Body Fluids Policy: Doncaster and Bassetlaw NHSF Trust

**PAT/IC 19**: Standard Precautions Policy: Doncaster and Bassetlaw NHSF Trust

**PAT/T 32**: Aseptic Non-Touch Technique Policy: Doncaster and Bassetlaw NHSF Trust

**PAT/PA 2**: Policy for consent to examination and treatment: Doncaster and Bassetlaw NHSF Trust

**PAT/PA 19**: Mental Capacity Act 2005 Policy and Guidance: Doncaster and Bassetlaw NHSF Trust

**PAT/PA 28**: Privacy and Dignity Policy: Doncaster and Bassetlaw NHSF Trust

10. REFERENCES

Ethicon Endo-Surgery. (2007) SAGB VC Adjustment guide.[leaflet]


**APPENDIX 1 – ADJUSTMENT GUIDELINES**

**Adjustment Guidelines**

Adjustment guide to be used with the Ethicon SAGB VC or the Apollo Lap-Band AP. Alternative adjustable gastric bands may vary in balloon capacity.

Total balloon capacity for the Ethicon SAGB VC: 11ml  
Total balloon capacity for the Apollo Lap-Band AP standard system: 10ml  
Total balloon capacity for the Apollo Lap-Band AP large system: 14ml

Initial band adjustment (6 weeks post-op)

- **<1.0kg**
  - Does the patient feel full and/or restricted after eating suggested amount?  
    - **NO**  
    - **YES**

  - Fill should be between approx 4ml and 5ml
  - For larger patients, restriction may be achieved with <5.5ml

- **>1.0kg**
  - Does the patient feel full and/or restricted after eating suggested amount?  
    - **NO**  
    - **YES**

  - Reassess patient’s dietary program for excess calorie intake (e.g. ice cream, soft drinks, fruit juices).

  - Reassess patient’s dietary program for insufficient caloric intake.  
    - Consider adjustment to create early feeling of satiety

  - No additional fluid should be added

Apollo (2016) and Ethicon endo-surgery (2007)
Second band adjustment (10-12 weeks post-op)

Assess the patients weekly weight loss

<1.0kg

Does the patient feel full and/or restricted after eating suggested amount?

NO

YES

Patient may receive an additional 0.5ml to 1.0ml fill.

Reassess patient's dietary program for excess calorie intake (e.g. ice cream, soft drinks, fruit juices).

>1.0kg

Does the patient feel full and/or restricted after eating suggested amount?

NO

YES

Reassess patient's dietary program for insufficient caloric intake.

Consider adjustment to create early feeling of satiety

No additional fluid should be added

Apollo (2016) and Ethicon endo-surgery (2007)
Band Maintenance:

Assess the patient's weekly weight loss

- <1.0kg
  - Does the patient feel full and/or restricted after eating suggested amount?
    - NO
    - YES
    - Patient may receive approximately 0.5ml fill and/or tailor adjustment based on patient feedback or past adjustment experience
    - Reassess patient's dietary program for excess calorie intake (e.g. ice cream, soft drinks, fruit juices).

- >1.0kg
  - Does the patient feel full and/or restricted after eating suggested amount?
    - NO
    - YES
    - Reassess patient's dietary program for insufficient caloric intake.
    - Consider adjustment to create early feeling of satiety
    - No additional fluid should be added

Apollo (2016) and Ethicon endo-surgery (2007)
## APPENDIX 2 - EQUALITY IMPACT ASSESSMENT PART 1 INITIAL SCREENING

<table>
<thead>
<tr>
<th>Service/Function/Policy/Project/ Strategy</th>
<th>Care Group/Executive Directorate and Department</th>
<th>Assessor (s)</th>
<th>New or Existing Service or Policy?</th>
<th>Date of Assessment</th>
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<td>Surgical Care Group/W Pillay</td>
<td>Katie Kirk</td>
<td>Existing policy</td>
<td>June 2016</td>
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</table>

1) **Who is responsible for this policy?** Bariatric Surgery

2) **Describe the purpose of the service / function / policy / project/ strategy?** Practice guidelines to ensure best practice and patient safety

3) **Are there any associated objectives?** No

4) **What factors contribute or detract from achieving intended outcomes?** – Appropriate training of practitioners and appropriate equipment

5) **Does the policy have an impact in terms of age, race, disability, gender, gender reassignment, sexual orientation, marriage/civil partnership, maternity/pregnancy and religion/belief?** No

- If yes, please describe current or planned activities to address the impact

6) **Is there any scope for new measures which would promote equality?** No

7) **Are any of the following groups adversely affected by the policy?**

<table>
<thead>
<tr>
<th>Protected Characteristics</th>
<th>Affected?</th>
<th>Impact</th>
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<tbody>
<tr>
<td>a) Age</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>b) Disability</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>c) Gender</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>d) Gender Reassignment</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>e) Marriage/Civil Partnership</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>f) Maternity/Pregnancy</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>g) Race</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>h) Religion/Belief</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>i) Sexual Orientation</td>
<td>No</td>
<td></td>
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</tbody>
</table>

8) **Provide the Equality Rating of the service / function /policy / project / strategy – tick (✓) outcome box**

<table>
<thead>
<tr>
<th>Outcome 1 ✓</th>
<th>Outcome 2</th>
<th>Outcome 3</th>
<th>Outcome 4</th>
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</thead>
</table>

*If you have rated the policy as having an outcome of 2, 3 or 4, it is necessary to carry out a detailed assessment and complete a Detailed Equality Analysis form in Appendix 4*

**Date for next review:** June 2019

**Checked by:** K Kirk **Date:** June 2016