Protocol for:

Laparoscopic sleeve gastrectomy

Contra indications to the laparoscopic sleeve gastrectomy

- Unwillingness to adopt the dietary habits critical to the procedure
- Drug or Alcohol addiction in the last 12 months
- Pregnancy
- Extremely limited mobility
- Extremes in age
- Abnormal upper GI endoscopy
- Severe oesophagitis
- Ulcers
- Oesophageal or gastric varices
- Injuries to stomach, intestines or oesophagus
- Previous gastrectomy
- Portal Hypertension
- Chronic pancreatitis
- Active infection (Cirrhosis)
- History of pulmonary embolus or severe pulmonary disease requiring oxygen therapy
- Illnesses that greatly reduce life expectancy including advanced cancer and end stage renal and hepatic disease
- Complex medical conditions increase the risk of surgery and are considered on a patient to patient basis

Pre surgery

- Patient to receive verbal and written information about the laparoscopic sleeve gastrectomy
- Consent form to be signed before admission
- Patient to attend pre assessment clinic
- Female patients taking the contraceptive pill or who have the contraceptive implant to stop or have removed 6 weeks before their operation date. Other forms of contraception to be advised. Can be re-started 6 weeks post-surgery.
- Female patients on HRT to stop 4-6 weeks before operation date Can be re-started 6 weeks post-surgery.
- Dalteparin take home pack given (burner bin)
- Two weeks before surgery all patients to start the liver reducing diet and visit their GP to get all medications changed to liquid/soluble or crushable forms. **Medications in this form only appropriate for after surgery and patients advised to continue on solid dose form up to day of surgery.**
- If the patients uses a CPAP/BiPAP machine, to be advised to bring this in on admission along with their mask and user manual
**Admission**

- Admitted on the day of or day before surgery
- Bariatric bed, armchair, commode, shower chair, sphygmanometer cuff etc available for use as needed.
- To commence on the bariatric surgery IPOC
- Check all hospital documentation and question any changes to health status
- Base line observations to be performed and recorded
- Patient to be weighed and BMI to be recorded in the notes
- VTE assessment to be completed, anti-embolic stockings and Dalteparin to be prescribed by clerking Dr. **nurse to check this has been completed**
- Anti-embolic stockings and Dalteparin to be administered evening before surgery
- If patient is not already on PPI, to be prescribed and given the morning of surgery
- Insulin dependant diabetics will need a specific plan through pre surgery fasting and 1st day post operation (admit day before for regime)
- Patient to be nil by mouth before surgery as per hospital policy
- Patient to wear bariatric gown
- To be seen by the Surgeon and Anaesthetist
- CPAP/BiPAP equipment to go to theatre with patient if they normally use these devices at home
- If the patient is going to theatre from the ward, to go on the heavy duty bed
- If the patient is going to theatre from TAU to walk into the operating theatre. Heavy duty bed to be obtained from the ward in preparation for post op care

**Operating Theatre and Recovery**

- Consent form and hospital documentation checked inline with hospital policy
- Hovermat placed on the theatre table before the patient arrives
- Cannula sited and IVI commenced
- Patient anaesthetised on the theatre table
- Patient positioned appropriately
- Flotron boots in place throughout and bare hugger utilised
- After completion, the patient is transferred directly onto the heavy-duty bed using the hovermat.
- Pressure areas and wound sites all checked and recorded
- Appropriate recovery observations performed along with all routine checks
- To be discharged to DCC/Ward when patient meets criteria
- Flotron device to remain in place and follow patient to DCC/Ward
- Operation information to be entered on the NBSR by the operating Surgeon

**DCC/Ward**

- Patient to be collected from recovery by the ward nurse and transferred back on the heavy duty bed
- Continue with IPOC
• If going to the ward, to be nursed in an observation bay and O2 Sats and resps to be monitored closely (overnight pulse oximetry and 2 hourly observations)
• Appropriate post-op/DCC observations.
• CPAP/BiPAP to be used if the patient usually sleeps using this devices at home (patient will be asked to bring in all equipment)
• Flotron device in place until patient mobile. Anti-embolic stockings to remain in place for 6 weeks post-op.
• Sit patient up and out of bed as soon as possible. Encourage mobilisation.
• Pressure areas and wounds to be checked and documented inline with hospital policy.
• Patient to be nil by mouth for 2 hours, then start on sips water only.
• Anti emetics and pain killers to be prescribed and given when required. All medication to be administered via injection until allowed fluids then MUST be liquid, soluble or crushable forms. No tablets for six weeks post op
• To start on sips of fluid initially, building up to free fluids. No food to be taken in the first week post op, just fluids.
  • Day 1 500mls – 700mls per oral
  • Day 2 1500mls tolerated prior to discharge
• IVI to be maintained and only discontinued once tolerating free fluids
• Patient discharged home by the Surgeon/Member of the Bariatric team
• If Wallace drain in situ to be removed along with any cannulas or lines
• Patient given specific written and verbal advice regarding post op diet by the Specialist Dietitian prior to discharge
• Diabetics to be reviewed by the Consultant Endocrinologist (Dr Dewan)/ CNS diabetes before discharge, Bariatric team will arrange
• Not for routine bloods unless clinically indicated
• Aim for discharge day 1 or day 2 post surgery

Discharge Criteria

• EWS 0
• Mobilising
• Adequate oral intake (above 1500mls)
• Pain and nausea free
• R/V by Consultant Surgeon

Hospital Medication

Recommended anti emetics

• Cyclizine 50mg, TDS, IV
• Ondansatron 4mg, TDS, IV (alternate these two medications every 4 hours)

Recommended proton pump inhibitors

• Omeprazole 40mg, OD, IV or
• Lansoprazole 30mg, OD, fast tab (only when taking fluids)
Recommended pain killers

- Paracoxib, 40mg, BD, IV or
- Paracetamol 1g, QDS, IV or oral liquid
- Tramadol 50-100mg, PRN, IV (only if necessary, monitor sats and resps)

Discharge and discharge medication

- Patient to be seen by the CNS and Dietitian prior to going home. Discharge information regarding diet and aftercare given in verbal and written forms

No change to usual medication unless changed by Consultant Endocrinologist and team (all to be liquid/soluble or crushable form for 6 weeks after surgery)

<table>
<thead>
<tr>
<th>Medication</th>
<th>Quantity</th>
<th>Form</th>
<th>Frequency</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adcal D3</td>
<td>X1</td>
<td>Chewable</td>
<td>BD</td>
<td>Lifelong</td>
</tr>
<tr>
<td>Ferrous Fumarate oral solution</td>
<td>5ml</td>
<td>Liquid</td>
<td>OD</td>
<td>Lifelong</td>
</tr>
<tr>
<td>Dalteparin</td>
<td>5000 units</td>
<td>Sub-cutaneous Injection</td>
<td>OD (18.00)</td>
<td>10 days post-surgery</td>
</tr>
<tr>
<td>Lansoprazole</td>
<td>30mg</td>
<td>Fast-tab for 6 weeks then change to capsule</td>
<td>OD</td>
<td>6 months post-surgery</td>
</tr>
<tr>
<td>Forceval</td>
<td>X1</td>
<td>Dispersible for 6 weeks then change to capsule</td>
<td>OD</td>
<td>Lifelong</td>
</tr>
</tbody>
</table>

Advised to have a Vitamin B12 injection, Hydroxocobalamin 1mg/1ml intra-muscular injection every 3 months at GP practice
Advised to keep using Anti-thrombotic stockings for 6 weeks post surgery

Extras if required (prescribe only for 2 weeks following surgery)

- Paracetamol 250mg/5ml oral suspension, sugar free. 1g every 6 hours
- Ondansatron syrup/film 4mg, TDS

Follow Up

- Telephone consultation with patient undertaken within 48 hours of discharge
- First outpatient’s appointment at 1 week post op.
Subsequent follow up appointments will be arranged by the SOPD and CNS

Protocol reviewed and agreed by the Bariatric MDT: October 2016
Approved at Trust Drugs & Therapeutics: October 2016
Review Date: October 2017