

# SESLHD GUIDELINE COVER SHEET



**Health**  
South Eastern Sydney  
Local Health District

<b>NAME OF DOCUMENT</b>	Gastrografin™ in the treatment of Adhesional Small Bowel Obstruction - administration of
<b>TYPE OF DOCUMENT</b>	GUIDELINE
<b>DOCUMENT NUMBER</b>	SESLHDGL/055
<b>DATE OF PUBLICATION</b>	September 2025
<b>RISK RATING</b>	Medium
<b>LEVEL OF EVIDENCE</b>	National Safety and Quality Health Service Standard: Standard 4 – Medication Safety
<b>REVIEW DATE</b>	September 2028
<b>FORMER REFERENCE(S)</b>	SESLHDGL/055 – Administration of Gastrografin™ in the treatment of Adhesional Small Bowel Obstruction
<b>EXECUTIVE SPONSOR or EXECUTIVE CLINICAL SPONSOR</b>	Clinical Stream Director, Surgery, Perioperative and Anaesthetics
<b>AUTHOR</b>	Helen Cox Clinical Nurse Consultant – Acute Surgery POWH
<b>POSITION RESPONSIBLE FOR DOCUMENT</b>	Paul Clifford SESLHD Clinical Stream Manager – Surgery, Perioperative, Anaesthetic Services <a href="mailto:Paul.Clifford@health.nsw.gov.au">Paul.Clifford@health.nsw.gov.au</a>
<b>FUNCTIONAL GROUP(S)</b>	Medicine Nursing and Midwifery Surgery, Perioperative and Anaesthetics
<b>KEY TERMS</b>	Gastrografin™ Adhesional Small Bowel Obstruction Nasogastric tube
<b>SUMMARY</b>	Details the role the nurse must undertake in the administration of Gastrografin™ caring for a patient with Adhesional Small Bowel Obstruction.

**THIS DOCUMENT IS A GUIDE FOR BEST PRACTICE**  
**This Guideline is intellectual property of South Eastern Sydney Local Health District.**  
**Guideline content cannot be duplicated.**

Feedback about this document can be sent to [SESLHD-Policy@health.nsw.gov.au](mailto:SESLHD-Policy@health.nsw.gov.au)

## **Gastrografin™ in the treatment of Adhesional Small Bowel Obstruction – administration of**

Section 1 - Background .....	3
Section 2 - Principles .....	5
Section 3 - Definitions .....	5
Section 4 - Responsibilities .....	6
Section 5 - Procedure .....	6
Section 6 - Observations and Nutrition .....	8
Section 7 - Variances .....	9
Section 8 - Documentation and References .....	9
Documentation .....	9
References .....	9
External References .....	9
SESLHD References .....	10
Version and Approval History .....	10

## Section 1 - Background

The administration of Gastrografin™ in the treatment of Adhesional Small Bowel Obstruction (ASBO) guideline has been created to provide an evidence-based reference for managing patients across SESLHD. The aim of the Guideline is to standardise the role the Medical Officer and the Nurse caring for a patient requiring Gastrografin™ for the treatment of adhesional small bowel obstruction.

The purpose of the Guideline is as follows:

- Reduce clinical error.
- Provide evidence based best practice guideline.
- Limit unwarranted variation in clinical practice.
- Improve patient safety.
- Provide support for new and transitioning staff regardless of facility.

Small bowel obstruction is one of the most common surgical emergencies and main causes of hospital admission. It is the most prevalent cause leading to bowel related surgical procedures. Almost 75% of the obstruction cases are considered to be the consequence of post surgical adhesion.<sup>(4)</sup>

Water soluble contrast followed by an abdominal radiograph after at least four hours can accurately predict the likelihood of resolution of a small bowel obstruction. Gastrografin™ reduces the duration of hospital stay in patients with adhesive small bowel obstruction that do not require surgery.<sup>(3)</sup>

Contraindications include:

- Allergy or hypersensitivity to Iodine or any ingredients of Gastrografin®
- Previous reaction to Iodinated Contrast Media
- Manifest hyperthyroidism
- Hypovolaemia or dehydration

Precautions include:

- Pregnancy or Breastfeeding
- Thyroid Conditions (Goitre / Hyperthyroidism)
- Interleukin - previous treatment up to several weeks
- Severe Heart Disease (increases susceptibility to outcomes of hypersensitivity)
- Possibility of aspiration or broncho-oesophageal fistula (not for undiluted oral administration)
- History of allergic disorders or asthma
- Ensure adequate hydration

**Important Drug interactions:**

- Interleukin 2 – increased risk of delayed reactions
- Beta blockers – resistant to treatment of anaphylaxis/hypersensitivity reactions with beta-agonists

**NOTE: The use of Gastrografin™ in Adhesional Small Bowel Obstruction is considered to be an ‘Off-Label’ use. Its has been approved by the NSW Medicines Formulary in line with this Guideline.**

## Section 2 - Principles

Provides appropriate prescribing, administration and understanding of the administration of Gastrografin™ in the setting of an adhesional small bowel obstruction.

This rule applies to inpatients of South Eastern Sydney Local Health District (SESLHD).

## Section 3 - Definitions

**Gastrografin™** or Amidotrizoate meglumine and sodium amidotrizoate is an oral water-soluble contrast medium. It acts like an X-Ray dye when X-Rays of the gastrointestinal tract are being taken.

Gastrografin is typically used as second line therapy – best commenced within 12-24 hours if appropriate

First Line Therapy – Nil by Mouth and Insertion of Nasogastric Drainage Tube



NB: Authors own photograph.

### Adhesional Small Bowel Obstruction

Adhesions are 'band-like' scar tissue that forms between two surfaces inside the body and cause them to stick together.

An Adhesional Small Bowel Obstruction happens when the small intestine is partly or completely blocked by scar tissue. This is usually associated with previous abdominal surgery, or it can be a congenital defect.

The blockage prevents food, fluids, and gas from moving through the intestines in the normal way. The blockage may cause severe pain that comes and goes (colicky) in nature.

## Section 4 - Responsibilities

### **Medical Officer is responsible for the following when caring for a patient with Adhesional Small Bowel Obstruction:**

- Diagnosing the patient with Adhesional Small Bowel Obstruction (Abdominal X-Ray or CT Abdomen).
- Decision to administer Gastrografin™ has been made by Consultant Surgeon.
- Gastrografin must be prescribed on the eMR, eRIC or in Mosaik/ ARIA. In the absence of eMM systems, the appropriate paper medication chart may be used.
- Prescribing an antiemetic IV/IM on eMeds.
- Ordering and follow up of Abdominal X-Ray.

### **Registered Nurse is responsible for the following when caring for a patient with Adhesional Small Bowel Obstruction:**

- Ensuring Gastrografin has been appropriately prescribed via eMR (100mLs via nasogastric tube or orally).
- Checking right medication, right dose, right route, right patient, right time, allergies to medications or contrast dyes.
- Explaining procedure to patient. Ensure there is equipment at bedside in case of vomiting pre and post administration of Gastrografin™.  
Observe patient until the Abdominal X-Ray takes place approximately 4 to 8 hours post administration

## Section 5 - Procedure

1. **For Nasogastric Tube Administration:** Ensure the placement of nasogastric tube has been checked by Medical Officer.

Using catheter tip of a 50 mL syringe; draw up 50 mL of Gastrografin and insert into nasogastric tube. This should be a slow push over 3 to 5 minutes. Do not exert pressure. Administer without force. Draw up and administer a second 50 mL of Gastrografin via nasogastric tube.

**Immediately spigot or clamp the nasogastric tube with a 'G Clamp'.** Inform Medical Officer of administration, so that an Abdominal X-Ray can be ordered to be taken six to twelve hours post administration.

2. **For Oral Administration:** Ensure the patient is in an upright position. Pour Gastrografin into a cup and ask the patient to drink at a pace they are able tolerate.  
Do not administer undiluted orally in patients with suspected possibility of aspiration or broncho-oesophageal fistula. If the patient can tolerate oral therapy, give 100 mL over approximately 20 minutes. Dilution with an equal volume of water is recommended in elderly or cachectic patients.

---

**Ensure patient has an antiemetic prescribed via intravenous or intramuscular route and an antiemesis bag within reach in the event of vomiting pre and post administration of Gastrografin™.**

**NOTE: Aspiration can occur, and the patient should be monitored during the post administration period.**

## Section 6 - Observations and Nutrition

### OBSERVATIONS:

- Monitor patient for any signs or symptoms of an adverse drug reaction.
- Vomiting, nausea, and diarrhoea are the most frequent adverse effects.
- Skin reaction
- Aspiration
- Anaphylaxis is a rare event monitor for any one of below:
  - Difficult/noisy breathing
  - Swelling of the tongue
  - Swelling/tightness in the throat
  - Difficulty talking and/or hoarse voice.
  - Wheeze or persistent cough.
  - Persistent dizziness or collapse

**A Rapid Response or Code Blue needs to be called if suspected, for management guideline refer to [SESLHDGL/125 - Acute Anaphylaxis Management](#) or [ACI Anaphylaxis Clinical Tool](#)**

- Monitor patient for any signs relating to aspiration.
- General observations should be documented, and patient observed whilst waiting for abdominal x-ray which takes place approximately 4-6 hours. **Inform Medical Officer if noticeable changes occur in the aforementioned observations.** Call a code blue or rapid response if required a per [SESLHDPR/697 - Management of the Deteriorating Adult Inpatient \(excluding Maternity\)](#) and [SESLHDPR/705 - Management of the Deteriorating Maternity Woman](#).
- Be aware of potential dehydration, maintain adequate hydration.

### NUTRITION

- Patient to remain Nil by Mouth (NBM) until the post Gastrografin™ Abdominal X-Ray has been attended within 12 hours of administration<sup>(6)</sup> and the patient has been reviewed by Surgical / Medical Team.



## Section 7 - Variances

### VARIANCES

In the Event of Aspiration or Adverse Drug Reaction a Code Blue should be activated.

## Section 8 - Documentation and References

### Documentation

- SESLHD Fluid Balance Chart
- Electronic Medical Records (eMR). Detailed documentation needs to be provided by the nurse caring for the patient with an Adhesional Small Bowel Obstruction regarding general observations.
- eMeds

### References

#### External References

1	NHMRC guidelines <a href="https://www.nhmrc.gov.au/guidelines">https://www.nhmrc.gov.au/guidelines</a> Accessed 18 Oct 2021
2	<a href="#">Abbas S, Bissett IP, Parry BR (2007) "Oral water soluble contrast for the management of adhesive small bowel obstruction (Review)". Cochrane Library. Issue 3</a>
3	<a href="#">Ceresoli M, et al (2016) "Water-soluble contrast agent in adhesive small bowel obstruction: a systematic review and meta-analysis of diagnostic and therapeutic value". The American Journal of Surgery. Vol 211 Pages: 114-1125</a>
4	<a href="#">Gastrografin – Product Information (2025) MIMS. May</a>
5	<a href="#">Safamanesh S, Pazouki A, Tamannaie Z et al (2013) "Evaluation of gastrografin therapeutic role in the management of small bowel obstruction". Journal of Minimally Invasive Surgical Sciences. Vol 2(1) Pages: 90-93</a>
6	<a href="#">Di Saverio S, Coccolini F, Galati M, et al. Bologna guidelines for diagnosis and management of adhesive small bowel obstruction (ASBO): 2013 update of the evidence-based guidelines from the world society of emergency surgery ASBO working group. World J Emerg Surg 2013; 8:42</a>
7	<a href="#">Cohen RB, Olafson SN, Krupp J, et al. Timing of Gastrografin administration in the management of adhesive small bowel obstruction (ASBO): Does it matter? Surgery 2021; 170:596</a>

## Ministry of Health References

- [NSW Health Policy Directive PD2022\\_032- Medication Handling](#)
- ACI [Anaphylaxis](#)

## SESLHD References

- [SESLHDPR/697 - Management of the Deteriorating Adult Inpatient \(exc Maternity\)](#)
- [SESLHDPR/705 - Management of the Deteriorating Maternity Woman](#)
- [SESLHDPR/336 - Documentation in the Health Care Record](#)
- [SESLHDPD/182 - Medicine: Off label use of registered medicines and use of unlicensed medicines](#)
- [SESLHDGL/125 - Acute Anaphylaxis Management](#)

## Version and Approval History

Date	Version no:	Author and approval
June 2017	DRAFT	Helen Cox – CNC Acute Surgery
March 2018	DRAFT	Draft for Comment
September 2018	DRAFT	Processed by Executive Services prior to submission to SESLHD Quality Use of Medicine Committee and SESLHD Clinical and Quality Council for endorsement
October 2018	0	Approved by SESLHD Quality Use of Medicine Committee and SESLHD Clinical and Quality Council.
October 2021	1	Review commenced. Hyperlinks, references and observations section updated.
February 2022	1	Approved by Executive Sponsor. To be tabled by Quality Use of Medicines Committee.
April 2022	1	Approved by QUM Committee
15 September 2025	1.1	Review including update to policies and hyperlinks. Amalgamation with Medicine Guideline SESLHDMG/136. Approved at SESLHD Drug and Therapeutics Committee meeting.