

## Going home with a drain

After surgery a wound drain may be placed in the wound to remove blood, secretions and other tissue fluids to promote healing and reduce the risk of infection. The drain remains in place until the volume drained is less than 20mls per day for two consecutive days. This may be for 1–2 weeks after surgery, but in some cases this may be longer. Many patients feel well enough to return home to recover after their surgery with 1 or 2 drains in place, being regularly checked by the community nurse.

Astra Tech  
Wound Drains



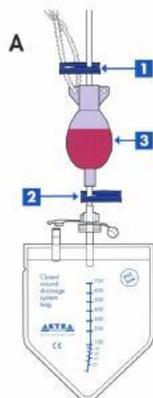
A complete range  
of wound drains that  
meets different needs

## What is a wound drain?

A wound drain is a thin, soft plastic tube, part of which is perforated with small holes. This tube is called a catheter and during surgery the part with the holes is placed in the surgical wound before it is closed. Any blood secretions or tissue fluids then pass through these small holes into the catheter and are collected in the bulb or bellows of the drainage system. The waterproof dressing over the wound makes it possible to shower. Avoid soaking the dressing.

There are two main low vacuum drains which are used, the exudrain and the bellovac drain.

### EXUDRAIN (has a bulb)



### BELLOVAC (has a bellows)



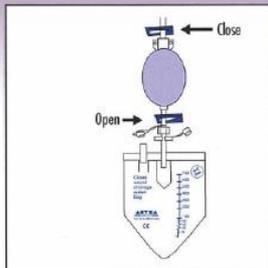
## Types of drains

The exudrain and bellovac drains are completely closed wound drainage systems consisting of a catheter, suction bulb or bellow with inlet and outlet tubing and a bag. There is a clamp on the inlet tubing of the bulb or bellow that is used when emptying and reactivating the system. There is a second clamp on the outlet tubing of the bulb which is used when the bag is removed or changed. There are also three non-return valves – one in the bag and two in the bulb or bellow – to ensure that fluids can only go in one direction: away from the wound. The bag is connected to the bulb or bellow

with a screw connector, and both the outlet tubing and the bag have caps attached for sealing off the outlet when changing bags. The exudrain and bellovac drains are a closed system which ensures safe and easy handling and minimises the risk of infection.

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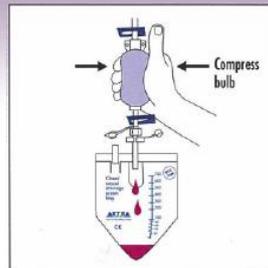
### Exudrain - Low Pressure Wound Drain System - Instructions for use.



**Emptying the bulb.**

**Step 1:**

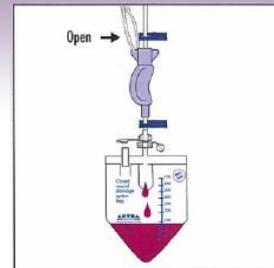
Close the inlet valve.  
(Ensure outlet clamp is open).



**Emptying the bulb.**

**Step 2:**

Compress the bulb fully.  
✓ This can be done slowly and in stages. The bulb will not re-expand due to the one way outlet valve.



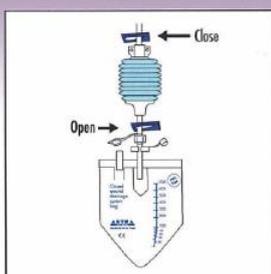
**Emptying the bulb.**

**Step 3:**

Re-open the inlet clamp.  
✓ Closing of the outlet clamp is optional during wound drainage.  
✓ **Note:** Closing of the outlet clamp is required prior to bag changing to prevent spillage.

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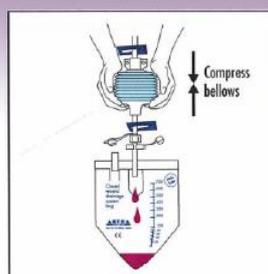
### Bellovac - Low Pressure Wound Drain System - Instructions for use.



**Emptying the bellows.**

**Step 1:**

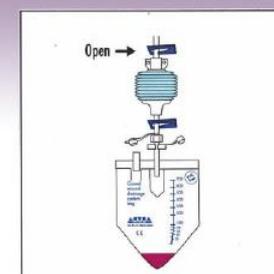
Close the inlet valve.  
(Ensure outlet clamp is open).



**Emptying the bellows.**

**Step 2:**

Compress the bellows fully.  
✓ This can be done slowly and in stages. The bellows will not re-expand due to the one way outlet valve.



**Emptying the bellows.**

**Step 3:**

Re-open the inlet clamp.  
✓ Closing of the outlet clamp is optional during wound drainage.  
✓ **Note:** Closing of the outlet clamp is required prior to bag changing to prevent spillage.

## Management of a drain

The exudrain or bellovac gently sucks fluid from the wound as the bulb expands. Therefore, the bulb or bellows should be allowed to expand freely and not be hindered by tight clothing or tucking it inside a skirt lining, narrow pocket or belt. The bulb or bellows should always be placed level with or below the wound to ensure that drainage continues. The tubing should not be kinked, although it may go above the level of the wound.

## Daily measurement of the drained volume

The exudrain or bellovac drain bag is graduated for this purpose. (It may help to mark the level with a felt pen on the bag each time the volume is read). Alternatively, if you have spare drain bags, change the drain bag daily at approximately the same time every day to get a 24hour volume.

On the last page of this brochure there is a drainage logbook where the volume drained each day can be documented.

Place the drainage bag in another plastic bag and dispose in the rubbish bin.

## Removal of the drain

Generally, when the drainage volume is less than 20ml per day for two consecutive days, the drain can be removed. Depending on the post-operative instructions, this may be done in the surgeon's rooms or at home by the community nurse.

When removing the drain, the inlet (upper) clamp is closed as close to the patient connector as possible. The securing suture is cut and removed. The drainage catheter is gently rotated while holding it close to the skin puncture site. The patient is asked to take a deep breath and the drainage catheter is firmly but gently pulled out as the patient exhales. A dry dressing is placed over the puncture site.

## Infection risk

It is important to wash your hands before and after handling the drain and touching your wound dressing.

The drain site should be checked daily for signs of local infection, which may cause the skin around the drain to become warm, red, painful or tender. You may also develop fevers, chills or flu like symptoms. The colour of the drainage fluid may change from a clear yellow/pink colour to a thicker cloudy colour.

If you think you have an infection, please contact your surgeon or community nurse as soon as possible. If you are feeling unwell, present to the nearest emergency department.

## Blockage of drainage catheter

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The drainage catheter can block if there is a build up of coagulated protein in the tubing, or a kink in the tubing, or the inlet clamp above the bulb or bellows is left in the 'closed' position or the bulb or bellows is fully expanded.

Suspect a blockage if there is a sudden decrease in drainage volume over a 24hour period or there is leakage of fluid around the drain insertion site or if there is swelling around the drain site or wound.

Always check that the inlet clamp above the bulb or bellows and the outlet clamp below the bulb or bellows is in the open position.

### The drainage catheter is slipping out

If you notice holes are showing in the drainage catheter close to the insertion site and the bulb or bellows fills with air each time it is squeezed and you notice little drainage fluid draining, the drainage catheter may be slipping out from the wound.

If the whole drainage catheter is pulled out, please place it in a plastic bag and show the community nurse or surgeon. Place a dry dressing over the drain insertion site.

### Follow up appointment

Our clinic nurse will see you at approximately two weeks after surgery unless otherwise specified.

Please contact the office on 9997 7346 to make this appointment.

### **Sydney General Surgeons**

Suite 502/20 Bungan St, Mona Vale NSW 2103

**Telephone** 02 9997 7346 **Facsimile** 02 9979 7540

**Email** [admin@sydneygeneralsurgeons.com.au](mailto:admin@sydneygeneralsurgeons.com.au) **Website** [sydneygeneralsurgeons.com.au](http://sydneygeneralsurgeons.com.au)

ABN 97 153 604 972

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**Record Of Drainage**

Patients Name.....  
.....

Date of Surgery .....

Hospital .....

Ward.....

Ward Nurse, name.....  
.....

Telephone .....

Community Nurse, name .....

Telephone .....

**Disposal of Bags Details**

**Removal of the Drain:**

You should make an appointment with the nurse when the daily discharge falls below .....ml

On.....consecutive days.

	Amount in mls
Day 1	
Day 2	
Day 3	
Day 4	
Day 5	
Day 6	
Day 7	
Day 8	
Day 9	
Day 10	
Day 11	
Day 12	
Day 13	
Day 14	
Day 15	
Total fluid output	

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