Atrium Pneumostat
Chest Drain Valve

Discharge Instructions
Introduction

Your physician has decided to change your chest drainage system to a smaller one. This is because your lung has not fully healed yet and you have what is known as an air-leak.

Your chest drainage system is called the Atrium Pneumostat Chest Drain Valve and this connects onto your chest drain. This device has a special valve that allows air to escape from your lungs but does not let air re-enter your chest. The escaping air may be heard as a soft whistling sound that comes from the device.

This device can also collect small amounts of fluid.

In order to look after this at home you will need to learn how to do the following activities:

1. Drain the collection chamber when it is half full using a syringe.
2. Monitor and record the amount of drainage that you remove from your device.
3. Monitor your breathing.
4. Monitor your chest drain dressing.
5. Meet regularly with your doctor and/or nurse.
Emptying the Pneumostat Collection Chamber

You will need the following equipment:

- Soap and water
- Clean towel
- 60 ml Luer Locked syringes
- Antiseptic wipes

Empty the collection chamber when it is 1/2 full. It can hold 30 mls or one ounce. It is important for the chamber not to overfill, as drainage will leak out of the special valve in the front of the device.

It is also important for you to empty the collection device before you lie down such as when you go to bed or have a nap to prevent fluid leaking out of the valve.

When emptying the device do not touch the end of the syringe or the port with your fingers. This prevents infection.

1. Wash your hands with soap and water (30 seconds!) and dry with a clean towel.
2. Clean the port at the end of the device with an antiseptic wipe. Let it dry.
3. To attach the syringe gently push and twist the syringe into the port. Use a new syringe each time you empty the device.
4. Gently pull the plunger back on the syringe to remove the fluid.
5. Remove the syringe. Clean the port at the end of the device again with a new antiseptic wipe.
6. Empty the drainage from the syringe into your toilet.
7. Place the empty syringe in the garbage.
8. Wash your hands with soap and water.
9. Record the amount and colour of the fluid you removed on the record in the back of this package.

Figure 1: How to attach a syringe and remove fluid from the collection chamber
**Showering and Bathing**

You should not take baths, go swimming, or go in a hot tub when you have a chest drain in place. It is best to either wash at a sink or take a shower.

If you shower, you will need to cover the chest drain dressing and pneumostat device with clear plastic wrap and secure this with tape so it does not get wet. You may need help from a family member or friend.

If water gets into the air leak well, soak up the water with some Q-tips or tissue until it is completely dry.

It is a good idea to have your wash or shower the morning of the day that you get your chest drain dressing done.

Remember to remove the plastic wrap after your shower.

**Chest Drain Dressing Changes**

You will have your chest drain dressing changed regularly by a nurse either at a home health clinic, hospital clinic or at your home. You will be told how often this will happen for you (usually once or twice a week). This dressing can also be changed at the time you visit your physician.

**Solving Problems with your Pneumostat Atrium Chest Drainage Device.**

From time to time, problems may occur. Learn “what to look for” and know “what to do” to correct them.

If you need help in solving some of the following problems, call your physician or nurse.

**If at anytime you have difficulty breathing or you have new chest pain go to your nearest emergency department. Do not drive yourself. Bring this booklet with you.**

If you have any questions or concerns, please contact your physician or speak to your nurse.

**Emergency Equipment**

On discharge home you will be given the following equipment:

- 2 blue plastic clamps and 2 cable ties - for your health care provider to use if the device needs changing.
- 1 spare pneumostat device
- Gauze dressings
- Jelonet dressings
- 400 ml plastic cup with lid
- Tape
- Q-tips
- Antiseptic wipes
- 2 x 60 ml luer lock syringes

You will need to purchase more syringes, antiseptic wipes and dressings from a medical supplies store.
<table>
<thead>
<tr>
<th>What to look for</th>
<th>What to do</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluid from the device has “spilled” out of the air leak valve in the front of the device.</td>
<td>Dry the air leak chamber with a Q-tip / tissue thoroughly</td>
</tr>
<tr>
<td>The fluid draining from your chest increases or changes in colour.</td>
<td>Call your physician or nurse.</td>
</tr>
<tr>
<td>You are unable to remove fluid from the device or the fluid you have removed gets, “sucked” back into the drainage device?</td>
<td>Call your physician or nurse right away. The device may need to be changed.</td>
</tr>
<tr>
<td>No fluid drains into the collection chamber.</td>
<td>Let your physician know that drainage has stopped. This may mean your chest drain is ready to come out or there is a blockage.</td>
</tr>
<tr>
<td>The soft whistling sound from the device stops.</td>
<td>Let your physician know that whistling has stopped. This may mean your chest drain is ready to come out or there is a blockage.</td>
</tr>
<tr>
<td>Your chest drain dressing is wet or looks like drainage is seeping through it.</td>
<td>Your chest drain dressing will need to be changed and your chest drain looked at by a nurse or physician</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>What to look for</th>
<th>What to do</th>
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<tbody>
<tr>
<td>Your chest drainage device falls off.</td>
<td>Attempt to re-attach the device to your chest drain. If you are successful in reattaching the device you should still go to your nearest emergency department for assessment.</td>
</tr>
<tr>
<td>If you cannot re-connect the device.</td>
<td>Submerse the chest drain into a bottle or bowl of clean water. This will form a barrier or “under water seal” and stop air going into the chest through the tube. Go to the nearest emergency room with the tube submersed.</td>
</tr>
</tbody>
</table>
## Record of Drains

Name: _______________________________

<table>
<thead>
<tr>
<th>Date and Time</th>
<th>Amount of Drainage Removed</th>
<th>Whistling Present Yes or No</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g. March 6 2009 8:00 am</td>
<td>10 mls</td>
<td>Yes</td>
</tr>
</tbody>
</table>

## References:

- Atrium Pneumostat Patient Instructions, 2009
- Ottawa General Hospital, Patient Instructions, Atrium Pneumostat Valve, 2005
- Email communication, Atrium product representative, March 2009