HA Convention 2013

Less is more: A simple chest drain site dressing is good enough

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16 May 2013 (Thu)
HAHO
Chest Drain Site Dressing

- Easy
- Basic nursing training
Lack of Consensus

- Not conform to guidelines
- Based on individual preferences
  (Tang, Velissaris, & Weeden, 1999)
- Little clinical evidence
  (Avery, 2000)
- Less well-established standards of care
- Experiential recommendations
  (Lehwaldt & Timmins, 2007)
**Disadvantages**

- Large amounts of tape and padding
- Clumsy & unhandy
- Time consuming to remove
- Obstacle in emergency situations
- Unpleasant & painful experience
- Skin irritation
- ? Prevention of dislodgement
- Restriction of chest wall movement
Objectives

- Change the CD site dressing safely with minimal discomfort / pain
- Secure the dressing and chest tube appropriately

(The Joanna Briggs Institute, 2002)

- Utilize materials efficiently & effectively
Suggestions

- A small, dry non-adherent surgical dressing with an adhesive border
- Avoid heavy strapping
- Site checking daily, change dressing every 48-72 hours unless soiled
- Avoid large amounts of tape and padding
- An omental tag

(Avery, 2000)

(BTS Guideline, 2010)
Taping the Connection

- Controversial
- If necessary ➔ use of transparent, waterproof and secure tapings

(Lit, 2009)
Simple CD Site Dressing With An Omental Tag Used in CTS QEH
Methodology

- Direct observation technique ➔ CD chart

- Face-to-face interviews
  1. 10 clients ➔ comfort, mobility, sleeping quality, skin irritability & chest wall movement
  2. 15 nursing staff members ➔ ease of assessment, cost effectiveness, time expenditure & incidence of dislodgement
Chest Drain Observation Chart

<table>
<thead>
<tr>
<th>Items</th>
<th>Time</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suction Force (kPa/cmH2O)</td>
<td>A</td>
<td>1/34</td>
</tr>
<tr>
<td>Connections are secure</td>
<td>N</td>
<td>2</td>
</tr>
<tr>
<td>Tubing &amp; bottle are below chest level and system is water sealed</td>
<td>A</td>
<td>3</td>
</tr>
<tr>
<td>Water level is swinging in tubing</td>
<td>P</td>
<td>4</td>
</tr>
<tr>
<td>Amount &amp; Nature of Drainage:</td>
<td>A</td>
<td>5</td>
</tr>
<tr>
<td>F.B. (Fresh Blood)</td>
<td>P</td>
<td>6</td>
</tr>
<tr>
<td>O.B. (Old Blood)</td>
<td>B</td>
<td>7</td>
</tr>
<tr>
<td>B.S. (Blood-Stained)</td>
<td>A</td>
<td>8</td>
</tr>
<tr>
<td>S.F. (Serous Fluid)</td>
<td>N</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>A</td>
<td>10</td>
</tr>
<tr>
<td>Presence of Air Leakage (Bubble)</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Position of tubing is free from kinking &amp; pulling</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>No dependent loop is found along the tubing</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Observation of Subcutaneous Emphysema</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Inspection of C/D</td>
<td>N</td>
<td></td>
</tr>
</tbody>
</table>

Key:
- No air leakage: -ve
- Air leakage present: +ve
- ✔ Checked

**Note:** Manual High Negativity Vent is depressed manually when suction is operating.
Interview Results

Choice of CD site dressing by nurses and clients

15 Nurses

10 Clients

Heavy Taping & Padding
Simple CD Dressing
Interview of Clients

Comparison of different chest drain site dressing by clients

- Comfort
- Better Mobility
- Better Sleeping Quality
- Skin Irritability
- Restriction of Chest Wall Movement

Number of Clients

- Simple CD Dressing
- Heavy Taping & Padding
- No Comment

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Interview of Nurses

Comparison of different chest drain site dressing by nurses

- Easy for Wound Inspection
- Cost Effective
- Incidence of Dislodgement
- Longer Time Expenditure for Dressing

Number of Nurses

- Simple CD Dressing
- Heavy Taping & Padding
- No Comment

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Conclusion

Simple chest drain site dressing can

- Ensure clients’ comfort
- Allow better chest wall movement
- Prevent unnecessary sufferings
- Cause fewer skin allergy
- Save time
- Meet cost effectiveness requirement
- Cause no increase in dislodgement
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Acknowledgements

- Dr. C C Ma (COS CTS QEH)
- Ms. W C Li (DOM NEU/MSW/CTS QEH)
- Mr. W H Kwok (WM H7 CTS QEH)
- Ms. S H Fok (WM G7 CTS QEH)
- Ms. W L Chan (NS CTS QEH)
- Mr. J H Lai (RN CTS QEH)
References


Thank you!