ED Diagnosis of Acute Coronary Syndromes: No Gender-Related Difference of 'Chest Discomfort'

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ED Diagnosis of Acute Coronary Syndromes: No Gender-Related Difference in the Incidence of ‘Chest Discomfort’
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**Introduction**
- There is evidence for gender and diabetes-related differences in symptoms of ACS upon presentation to the ED: i.e., non-diabetic men typically report 'chest pain,' whereas women and diabetics may report atypical complaints.
- This may reflect differences in either ACS-related chest pain or differences in the perception of pain.

**Objective**
- Our aim was to compare the frequency of broadly defined ‘chest associated discomfort’ rather than ‘chest pain’ reported by men vs. women and diabetics vs. non-diabetics with MI.

**Methods**
- This prospective, ongoing study enrolls patients presenting to an urban academic medical center with the subsequent diagnosis of NSTEMI or STEMI.
- After admission, patients were interviewed using a focused, semi-structured format and queried as to the presence (yes/no), severity, and quality of chest discomfort—defined as any symptom referred to the thorax—upon ED presentation.
- Severity was scored on a scale of 1 to 10.
- Patients were excluded if they were unstable or otherwise unable to give a history.

**Results**
- Incidence of chest discomfort was 91% in women and 94% in men. (p=0.69 by Fischer’s exact test)
- Incidence of chest discomfort was 86% in diabetics and 95% in non-diabetics. (p=0.18)

**Conclusion**
- These preliminary results suggest that, while there may be gender or diabetes-related differences in the perception of ‘chest pain’, there is an equivalent incidence and severity of ‘chest discomfort’ in all groups.
- This reinforces the importance of pursuing broad complaints of chest discomfort in the ED.

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**Figure 1:** Data: males vs. females

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>47</td>
<td>34</td>
</tr>
<tr>
<td>Number with chest discomfort</td>
<td>44 (94%)</td>
<td>31 (91%)</td>
</tr>
<tr>
<td>Number without chest discomfort</td>
<td>3 (6%)</td>
<td>3 (9%)</td>
</tr>
<tr>
<td>Average severity (p=0.76 by t-test)</td>
<td>7.2 ± 2.4</td>
<td>7.4 ± 2.8</td>
</tr>
</tbody>
</table>

**Figure 2:** Data: diabetics vs. non-diabetics

<table>
<thead>
<tr>
<th></th>
<th>Diabetics</th>
<th>Non-diabetics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>21</td>
<td>60</td>
</tr>
<tr>
<td>Number with chest discomfort</td>
<td>18 (86%)</td>
<td>57 (95%)</td>
</tr>
<tr>
<td>Number without chest discomfort</td>
<td>3 (14%)</td>
<td>3 (5%)</td>
</tr>
<tr>
<td>Average severity (p=0.34 by t-test)</td>
<td>6.8 ± 2.9</td>
<td>7.4 ± 2.4</td>
</tr>
</tbody>
</table>

**Figure 3:** Number of patients reporting each level of severity

- Males
- Females
- Diabetics
- Non-diabetics

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