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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.

	Males	Females
Total	47	34
Number with chest discomfort	44 (94%)	31 (91%)
Number without chest discomfort	3 (6%)	3 (9%)
Average severity (p=0.76 by t-test)	7.2 ± 2.4	7.4 ± 2.8

Figure 1: Data: males vs. females

	Diabetics	Non-diabetics
Total	21	60
Number with chest discomfort	18 (86%)	57 (95%)
Number without chest discomfort	3 (14%)	3 (5%)
Average severity (p=0.34 by t-test)	6.8 ± 2.9	7.4 ± 2.4

Figure 2: Data: diabetics vs. non-diabetics

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)

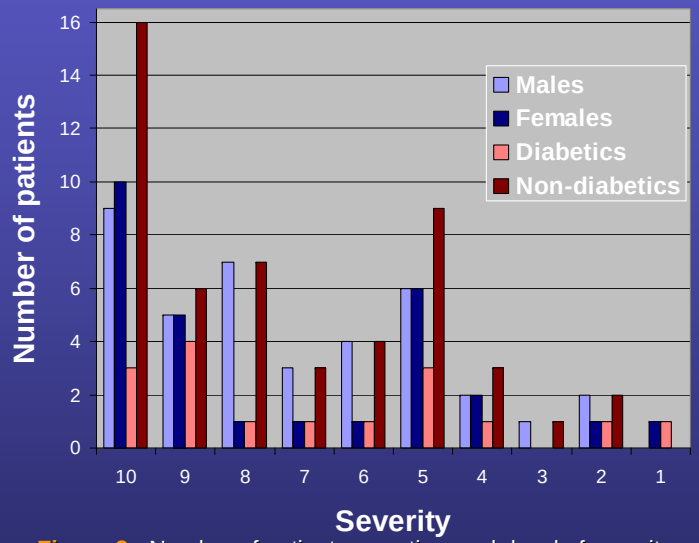

Figure 3: Number of patients reporting each level of severity

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.