SUPPLEMENTAL MATERIAL

Supplemental Table 1: Taxonomy classification

Appendix: Sample of VIRGO cases by class

Supplemental Table 1. Taxonomy classification.

Class

| | I | IIa | IIb | IIIa | IIIb | IV | V |
|----------------------------------|--------------|------------|------------|------------|------------|------------|------------|
| Total n (%) | 2425 (86.5%) | 35 (1.2%) | 55 (2.0%) | 88 (3.1%) | 150 (5.4%) | 31 (1.1%) | 18 (0.6%) |
| Sociodemographic characteristics | | | | | | | |
| Females | 1564 (82.5%) | 27 (1.4%) | 45 (2.4%) | 81 (4.3%) | 133 (7.0%) | 29 (1.5%) | 16 (0.8%) |
| Males | 861 (94.9%) | 8 (0.9%) | 10 (1.1%) | 7 (0.8%) | 17 (1.9%) | 2 (0.2%) | 2 (0.2%) |
| Age (mean; SD) | 47.3 (6.0) | 47.8 (5.3) | 47.3 (6.7) | 46.7 (6.1) | 45.0 (7.6) | 43.4 (7.7) | 47.6 (6.0) |
| Race | | | | | | | |
| White/Caucasian | 1863 (77.0%) | 21 (60.0%) | 45 (81.8%) | 61 (69.3%) | 97 (64.7%) | 22 (71.0%) | 10 (55.6%) |
| Black/African American | 417 (17.2%) | 12 (34.3%) | 9 (16.4%) | 23 (26.1%) | 37 (24.7%) | 7 (22.6%) | 4 (22.2%) |
| Other | 141 (5.8%) | 2 (5.7%) | 1 (1.8%) | 4 (4.5%) | 16 (10.7%) | 2 (6.5%) | 4 (22.2%) |
| Ethnicity | | | | | | | |
| Hispanic | 175 (7.2%) | 2 (5.7%) | 7 (13.0%) | 7 (8.1%) | 18 (12.1%) | 2 (6.5%) | 2 (11.1%) |
| Marital status | | | | | | | |
| Married/Co-habiting | 1366 (56.4%) | 16 (45.7%) | 21 (38.2%) | 47 (53.4%) | 86 (57.7%) | 18 (58.1%) | 9 (50.0%) |
| Divorced/Separated | 632 (26.1%) | 13 (37.1%) | 25 (45.5%) | 22 (25.0%) | 32 (21.5%) | 5 (16.1%) | 4 (22.2%) |
| Widowed | 75 (3.1%) | 1 (2.9%) | 1 (1.8%) | 4 (4.5%) | 3 (2.0%) | 1 (3.2%) | 0 (0.0%) |
| Single | 331 (13.7%) | 5 (14.3%) | 7 (12.7%) | 14 (15.9%) | 28 (18.8%) | 7 (22.6%) | 5 (27.8%) |
| Other | 17 (0.7%) | 0 (0.0%) | 1 (1.8%) | 1 (1.1%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) |
| Monthly financial situation | | | | | | | |
| Some money left over | 715 (29.5%) | 8 (22.9%) | 15 (27.3%) | 26 (29.5%) | 40 (26.7%) | 11 (35.5%) | 4 (22.2%) |
| Just enough to make ends | 855 (35.3%) | 9 (25.7%) | 25 (45.5%) | 33 (37.5%) | 62 (41.3%) | 10 (32.3%) | 7 (38.9%) |
| meet | | | | | | | |

| | Not enough to make ends | 828 (34.2%) | 18 (51.4%) | 14 (25.5%) | 28 (31.8%) | 45 (30.0%) | 9 (29.0%) | 7 (38.9%) |
|---------|-----------------------------|--------------|------------|------------|------------|-------------|------------|------------|
| | meet | | | | | | | |
| | Patient refused | 25 (1.0%) | 0 (0.0%) | 1 (1.8%) | 1 (1.1%) | 3 (2.0%) | 1 (3.2%) | 0 (0.0%) |
| Sympton | n presentation | | | | | | | |
| | Typical chest pain | 1886 (77.8%) | 22 (62.9%) | 40 (72.7%) | 56 (63.6%) | 116 (77.3%) | 25 (80.6%) | 11 (61.1%) |
| | Atypical chest pain | 495 (20.4%) | 10 (28.6%) | 14 (25.5%) | 18 (20.5%) | 27 (18.0%) | 5 (16.1%) | 6 (33.3%) |
| | Back pain | 351 (14.5%) | 3 (8.6%) | 8 (14.5%) | 16 (18.2%) | 20 (13.3%) | 6 (19.4%) | 5 (27.8%) |
| | Abdominal pain | 119 (4.9%) | 3 (8.6%) | 1 (1.8%) | 4 (4.5%) | 7 (4.7%) | 2 (6.5%) | 1 (5.6%) |
| | Nausea | 1084 (44.7%) | 11 (31.4%) | 24 (43.6%) | 24 (27.3%) | 64 (42.7%) | 12 (38.7%) | 7 (38.9%) |
| | Other type/location of pain | 551 (22.7%) | 8 (22.9%) | 13 (23.6%) | 19 (21.6%) | 41 (27.3%) | 9 (29.0%) | 7 (38.9%) |
| | Shortness of breath | 1216 (50.1%) | 23 (65.7%) | 25 (45.5%) | 38 (43.2%) | 61 (40.7%) | 13 (41.9%) | 5 (27.8%) |
| | Fatigue | 270 (11.1%) | 8 (22.9%) | 5 (9.1%) | 10 (11.4%) | 21 (14.0%) | 4 (12.9%) | 0 (0.0%) |
| | Other symptoms | 1679 (69.2%) | 29 (82.9%) | 35 (63.6%) | 68 (77.3%) | 108 (72.0%) | 23 (74.2%) | 12 (66.7%) |
| Trigger | | | | | | | | |
| | Cocaine use | 28 (1.2%) | 1 (2.9%) | 2 (3.6%) | 2 (2.3%) | 2 (1.3%) | 0 (0.0%) | 0 (0.0%) |
| | Other illicit drugs | 39 (1.6%) | 1 (2.9%) | 1 (1.8%) | 3 (3.4%) | 6 (4.0%) | 1 (3.2%) | 2 (11.1%) |
| | Discontinuation of previous | 55 (2.3%) | 1 (2.9%) | 1 (1.8%) | 1 (1.1%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) |
| | antiplatelet therapy | | | | | | | |
| | Sexual relations | 11 (0.5%) | 0 (0.0%) | 0 (0.0%) | 1 (1.1%) | 1 (0.7%) | 1 (3.2%) | 0 (0.0%) |
| | Physical stress | 242 (10.0%) | 2 (5.7%) | 3 (5.5%) | 10 (11.4%) | 21 (14.0%) | 4 (12.9%) | 1 (5.6%) |
| | Mental stress | 198 (8.2%) | 4 (11.4%) | 9 (16.4%) | 12 (13.6%) | 21 (14.0%) | 3 (9.7%) | 4 (22.2%) |
| | Labor/postpartum | 3 (0.1%) | 1 (2.9%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 2 (6.5%) | 0 (0.0%) |
| | Other | 173 (7.1%) | 9 (25.7%) | 3 (5.5%) | 19 (21.6%) | 11 (7.3%) | 5 (16.1%) | 1 (5.6%) |
| | | | | | | | | |

Blood pressure on arrival, mmHg

| | First SBP - mean/SD | 145.4 (30.6) | 173.5 (36.3) | 143.8 (22.1) | 152.9 (37.1) | 134.9 (19.2) | 137.2 (18.4) | 144.7 (24.4) |
|---|-------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | First DBP - mean/SD | 87.5 (19.2) | 98.5 (28.0) | 83.0 (13.2) | 93.9 (25.0) | 79.2 (11.9) | 86.2 (16.5) | 87.2 (12.5) |
| K | illip Class on arrival | | | | | | | |
| | I (no rales) | 2211 (92.5%) | 31 (91.2%) | 53 (96.4%) | 78 (90.7%) | 133 (88.7%) | 29 (93.5%) | 17 (94.4%) |
| | II | 59 (2.5%) | 2 (5.9%) | 0 (0.0%) | 6 (7.0%) | 8 (5.3%) | 0 (0.0%) | 0 (0.0%) |
| | III | 20 (0.8%) | 1 (2.9%) | 0 (0.0%) | 0 (0.0%) | 1 (0.7%) | 0 (0.0%) | 0 (0.0%) |
| | IV | 10 (0.4%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) |
| | Unknown | 89 (3.7%) | 0 (0.0%) | 2 (3.6%) | 2 (2.3%) | 8 (5.3%) | 2 (6.5%) | 1 (5.6%) |
| Μ | lyocardial demand | | | | | | | |
| | Yes (%) | 883 (37.1%) | 34 (97.1%) | 3 (5.6%) | 85 (100.0%) | 1 (0.7%) | 12 (38.7%) | 4 (23.5%) |
| | Severe hypertension (BP | 244 (100.0%) | 16 (100.0%) | 2 (100.0%) | 18 (100.0%) | 0 (0.0%) | 1 (100.0%) | 0 (0.0%) |
| | >180/100 mmHg) | | | | | | | |
| | Severe hypertension (SBP | 62 (2.6%) | 1 (2.9%) | 0 (0.0%) | 6 (6.9%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) |
| | <90 mmHg) | | | | | | | |
| | Heart rate >120 bpm | 91 (3.8%) | 4 (11.4%) | 0 (0.0%) | 27 (30.7%) | 0 (0.0%) | 2 (6.5%) | 0 (0.0%) |
| | Atrial fibrillation/flutter | 26 (1.1%) | 2 (5.7%) | 0 (0.0%) | 1 (1.2%) | 0 (0.0%) | 1 (3.2%) | 0 (0.0%) |
| | Ventricular | 2 (0.1%) | 0 (0.0%) | 0 (0.0%) | 2 (2.4%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) |
| | fibrillation/tachycardia | | | | | | | |
| | Severe illness | 48 (2.0%) | 6 (17.1%) | 0 (0.0%) | 7 (8.0%) | 0 (0.0%) | 3 (9.7%) | 1 (5.6%) |
| | Other | 83 (3.4%) | 8 (22.9%) | 0 (0.0%) | 18 (20.5%) | 1 (0.7%) | 1 (3.2%) | 1 (5.6%) |
| В | aseline cardiovascular risk factors | | | | | | | |
| | Family history of premature | 1816 (78.6%) | 28 (80.0%) | 38 (73.1%) | 62 (73.8%) | 89 (64.0%) | 22 (73.3%) | 12 (75.0%) |
| | CAD (any relative) | | | | | | | |
| | Hypertension | 1620 (66.8%) | 32 (91.4%) | 35 (63.6%) | 55 (62.5%) | 84 (56.0%) | 16 (51.6%) | 12 (66.7%) |
| | | | | | | | | |

| | Dyslipidemia | 1255 (51.9%) | 21 (60.0%) | 31 (56.4%) | 34 (38.6%) | 63 (42.0%) | 12 (38.7%) | 10 (55.6%) |
|--------|-----------------------------------|--------------|------------|------------|------------|------------|------------|------------|
| | Smoker | | | | | | | |
| | Yes (%) | 1773 (73.2%) | 23 (65.7%) | 36 (65.5%) | 54 (61.4%) | 80 (53.3%) | 12 (38.7%) | 13 (72.2%) |
| | No (%) | 650 (26.8%) | 12 (34.3%) | 19 (34.5%) | 34 (38.6%) | 70 (46.7%) | 19 (61.3%) | 5 (27.8%) |
| | If Yes, type | | | | | | | |
| | Current (past month) | 1407 (79.4%) | 15 (65.2%) | 29 (80.6%) | 41 (75.9%) | 45 (56.3%) | 8 (66.7%) | 8 (61.5%) |
| | Past (last 1 month to 1 | 76 (4.3%) | 4 (17.4%) | 2 (5.6%) | 3 (5.6%) | 1 (1.3%) | 0 (0.0%) | 0 (0.0%) |
| | year) | | | | | | | |
| | Past (>1 year) | 265 (14.9%) | 4 (17.4%) | 5 (13.9%) | 10 (18.5%) | 34 (42.5%) | 4 (33.3%) | 5 (38.5%) |
| | Unknown | 25 (1.4%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) |
| | Diabetes | 889 (36.7%) | 19 (54.3%) | 21 (38.2%) | 27 (30.7%) | 31 (20.7%) | 5 (16.1%) | 4 (22.2%) |
| | Obstructive sleep apnea | 115 (4.8%) | 3 (8.6%) | 5 (9.3%) | 9 (10.2%) | 9 (6.0%) | 0 (0.0%) | 0 (0.0%) |
| | History of cocaine use | 109 (4.5%) | 2 (5.7%) | 4 (7.3%) | 7 (8.0%) | 10 (6.7%) | 1 (3.2%) | 0 (0.0%) |
| | History of alcohol abuse | 161 (6.7%) | 2 (5.7%) | 2 (3.6%) | 10 (11.4%) | 12 (8.0%) | 3 (9.7%) | 0 (0.0%) |
| | History of other illicit drug use | 193 (8.0%) | 4 (11.4%) | 2 (3.6%) | 12 (13.8%) | 17 (11.3%) | 3 (9.7%) | 2 (11.1%) |
| | Hypercoagulability syndrome | 30 (1.2%) | 1 (2.9%) | 1 (1.8%) | 4 (4.5%) | 3 (2.0%) | 1 (3.2%) | 1 (5.6%) |
| Physic | al activity | | | | | | | |
| | Recommended | 851 (35.4%) | 12 (35.3%) | 27 (49.1%) | 36 (41.4%) | 66 (44.0%) | 18 (58.1%) | 9 (50.0%) |
| | Insufficient | 722 (30.0%) | 7 (20.6%) | 11 (20.0%) | 18 (20.7%) | 39 (26.0%) | 4 (12.9%) | 4 (22.2%) |
| | No activity | 831 (34.6%) | 15 (44.1%) | 17 (30.9%) | 33 (37.9%) | 45 (30.0%) | 9 (29.0%) | 5 (27.8%) |
| Obesit | у | 1312 (54.1%) | 18 (51.4%) | 24 (43.6%) | 43 (48.9%) | 66 (44.0%) | 7 (22.6%) | 8 (44.4%) |
| Menop | pausal status (women) | | | | | | | |
| | Yes | 854 (55.3%) | 16 (59.3%) | 24 (53.3%) | 41 (51.3%) | 51 (39.2%) | 11 (37.9%) | 8 (50.0%) |
| | No | 691 (44.7%) | 11 (40.7%) | 21 (46.7%) | 39 (48.8%) | 79 (60.8%) | 18 (62.1%) | 8 (50.0%) |
| | | | | | | | | |

| At-risk for CHD (self-report) | | 1369 (56.6%) | 26 (74.3%) | 36 (65.5%) | 48 (54.5%) | 62 (41.6%) | 14 (45.2%) | 11 (61.1%) |
|-------------------------------|---------------------|--------------|------------|------------|------------|------------|------------|------------|
| At-risk for CHD | (doctor-report) | 1198 (50.5%) | 26 (74.3%) | 33 (62.3%) | 40 (46.5%) | 55 (37.7%) | 13 (41.9%) | 9 (50.0%) |
| Cardiovascular h | nistory | | | | | | | |
| Angina | | 655 (27.0%) | 16 (45.7%) | 21 (38.2%) | 17 (19.3%) | 30 (20.1%) | 9 (29.0%) | 7 (38.9%) |
| Myocard | ial infarction | 403 (16.6%) | 20 (57.1%) | 18 (32.7%) | 9 (10.2%) | 16 (10.7%) | 4 (12.9%) | 6 (33.3%) |
| PCI | | 416 (17.2%) | 12 (34.3%) | 12 (21.8%) | 5 (5.7%) | 3 (2.0%) | 4 (12.9%) | 8 (44.4%) |
| CABG | | 88 (3.6%) | 10 (28.6%) | 8 (14.5%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 1 (5.6%) |
| Stroke/t | ransient ischemic | 107 (4.4%) | 6 (17.1%) | 3 (5.5%) | 4 (4.5%) | 5 (3.3%) | 1 (3.2%) | 3 (16.7%) |
| attack | | | | | | | | |
| Congest | ve heart failure | 102 (4.2%) | 7 (20.0%) | 6 (10.9%) | 6 (6.8%) | 5 (3.3%) | 2 (6.5%) | 1 (5.6%) |
| Peripher | al artery disease | 62 (2.6%) | 3 (8.6%) | 3 (5.5%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) |
| Non-cardiac hist | ory | | | | | | | |
| Chronic | renal failure | 255 (10.6%) | 11 (31.4%) | 8 (15.1%) | 11 (12.5%) | 14 (9.4%) | 2 (6.5%) | 1 (5.6%) |
| Lung dis | ease | 263 (10.9%) | 6 (17.6%) | 15 (27.3%) | 17 (19.3%) | 21 (14.0%) | 3 (9.7%) | 2 (11.1%) |
| Depress | on | 963 (39.7%) | 18 (51.4%) | 30 (54.5%) | 42 (47.7%) | 66 (44.0%) | 16 (51.6%) | 8 (44.4%) |
| Venous | thromboembolism | 62 (2.6%) | 2 (5.7%) | 1 (1.8%) | 3 (3.4%) | 5 (3.3%) | 2 (6.5%) | 1 (5.6%) |
| Cancer | | 78 (3.2%) | 1 (2.9%) | 3 (5.5%) | 6 (6.8%) | 4 (2.7%) | 1 (3.2%) | 1 (5.6%) |
| Chronic | viral syndrome | 28 (1.2%) | 0 (0.0%) | 1 (1.8%) | 0 (0.0%) | 1 (0.7%) | 0 (0.0%) | 1 (5.6%) |
| Autoimn | nune disease | 74 (3.1%) | 0 (0.0%) | 0 (0.0%) | 3 (3.4%) | 7 (4.7%) | 1 (3.2%) | 1 (5.6%) |
| Thyroid | disease | 167 (6.9%) | 0 (0.0%) | 4 (7.3%) | 5 (5.7%) | 19 (12.7%) | 2 (6.5%) | 1 (5.6%) |
| Major ps | ychiatric diagnosis | 109 (4.5%) | 3 (8.6%) | 1 (1.8%) | 1 (1.1%) | 12 (8.0%) | 3 (9.7%) | 0 (0.0%) |
| Polycyst | c ovarian syndrome | 12 (0.8%) | 0 (0.0%) | 1 (2.2%) | 0 (0.0%) | 1 (0.8%) | 0 (0.0%) | 0 (0.0%) |
| (women |) | | | | | | | |
| | | | | | | | | |

Baseline health status

| | SF-12, mean (SD) | | | | | | | |
|---------|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | Physical component summary | 42.8 (12.0) | 35.5 (13.6) | 41.5 (12.7) | 43.8 (12.0) | 46.5 (12.7) | 49.4 (8.7) | 49.1 (9.9) |
| | Mental component summary | 45.6 (12.3) | 41.9 (12.3) | 46.8 (11.9) | 45.4 (13.6) | 44.1 (13.1) | 46.9 (15.3) | 43.4 (13.6) |
| | Seattle Angina Questionnaire, | | | | | | | |
| | median (IQR) | | | | | | | |
| | Physical limitation | 94.4 (66.7-100) | 75.0 (33.3-100) | 90.3 (73.6-100) | 91.7 (58.3-100) | 100 (83.3-100) | 100 (84.7-100) | 100 (75.0-100) |
| | Angina frequency | 90.0 (70.0-100) | 80.0 (70.0-100) | 90.0 (70.0-100) | 90.0 (80.0-100) | 100 (80.0-100) | 90.0 (80.0-100) | 90.0 (80.0-100) |
| | Treatment satisfaction | 100 (87.5-100) | 93.8 (75.0-100) | 93.8 (81.3 -100) | 100 (81.3-100) | 93.8 (81.3-100) | 100 (81.3-100) | 93.8 (75.0-100) |
| | Quality of life | 58.3 (41.7-75.0) | 41.7 (25.0-75.0) | 50.0 (33.3-66.7) | 58.3 (41.7-83.3) | 58.3 (41.7-75.0) | 58.3 (50.0-75.0) | 58.3 (41.7-83.3) |
| | Stress scale (PSS-I), mean | 25.9 (9.8) | 27.9 (10.4) | 27.0 (10.9) | 25.4 (9.4) | 27.3 (9.9) | 26.5 (9.3) | 29.9 (9.0) |
| | (SD) | | | | | | | |
| Tropor | nin | | | | | | | |
| | Maximum troponin (mean, | 28.6 (57.0) | 4.5 (5.5) | 10.3 (18.9) | 7.6 (27.3) | 6.8 (11.3) | 17.5 (17.5) | 11.1 (14.3) |
| | SD) | | | | | | | |
| Reperf | usion therapy | | | | | | | |
| | *Criteria for primary | 1168 (48.2%) | 1 (2.9%) | 2 (3.6%) | 6 (6.9%) | 9 (6.0%) | 7 (22.6%) | 1 (5.6%) |
| | reperfusion met, Yes (%) | | | | | | | |
| | PCI, Yes (%) | 1092 (93.5%) | NA | NA | NA | NA | NA | NA |
| Echoca | ardiogram | | | | | | | |
| | Obtained, Yes (%) | 1639 (67.8%) | 24 (68.6%) | 34 (61.8%) | 68 (77.3%) | 114 (76.0%) | 27 (87.1%) | 14 (77.8%) |
| If LV s | ystolic function documented | | | | | | | |
| | ≥55% | 790 (50.0%) | 10 (47.6%) | 19 (55.9%) | 39 (60.9%) | 77 (70.0%) | 14 (56.0%) | 9 (64.3%) |
| | 45-54% | 404 (25.6%) | 5 (23.8%) | 8 (23.5%) | 13 (20.3%) | 17 (15.5%) | 7 (28.0%) | 2 (14.3%) |
| | | | | | | | | |

| | 35-44% | 242 (15.3%) | 2 (9.5%) | 5 (14.7%) | 6 (9.4%) | 12 (10.9%) | 3 (12.0%) | 3 (21.4%) |
|-------|---------------------------|--------------|-------------|------------|------------|-------------|-------------|-------------|
| | <35% | 145 (9.2%) | 4 (19.0%) | 2 (5.9%) | 6 (9.4%) | 4 (3.6%) | 1 (4.0%) | 0 (0.0%) |
| Phys | ician's final diagnosis | | | | | | | |
| | NSTEMI | 1128 (46.5%) | 29 (82.9%) | 49 (89.1%) | 75 (85.2%) | 128 (85.3%) | 24 (77.4%) | 15 (83.3%) |
| | STEMI | 1297 (53.5%) | 6 (17.1%) | 6 (10.9%) | 13 (14.8%) | 22 (14.7%) | 7 (22.6%) | 3 (16.7%) |
| Aspir | rin on arrival | | | | | | | |
| | Yes | 2344 (97.4%) | 34 (97.1%) | 54 (98.2%) | 83 (98.8%) | 142 (95.9%) | 31 (100.0%) | 18 (100.0%) |
| Medi | cations at discharge | | | | | | | |
| | Aspirin | 2368 (98.8%) | 34 (97.1%) | 51 (94.4%) | 73 (90.1%) | 131 (91.6%) | 30 (100.0%) | 18 (100.0%) |
| | Oral antiplatelet | 2099 (88.5%) | 25 (75.8%) | 30 (56.6%) | 24 (31.2%) | 49 (36.0%) | 18 (62.1%) | 11 (64.7%) |
| | Beta-blocker | 2275 (98.5%) | 32 (97.0%) | 45 (88.2%) | 66 (86.8%) | 101 (83.5%) | 20 (83.3%) | 14 (93.3%) |
| | ACE inhibitor/ARB | 1607 (73.4%) | 25 (78.1%) | 34 (66.7%) | 44 (54.3%) | 58 (44.3%) | 13 (48.1%) | 9 (50.0%) |
| | Lipid-lowering medication | 2303 (96.8%) | 34 (100.0%) | 46 (86.8%) | 62 (75.6%) | 91 (66.9%) | 23 (85.2%) | 17 (100.0%) |
| 1-ye | ar mortality | | | | | | | |
| | Overall | 53 (2.2%) | 1 (3.0%) | 1 (1.9%) | 2 (2.4%) | 1 (0.7%) | 2 (6.9%) | 0 (0.0%) |
| | Women | 40 (2.6%) | 1 (4.0%) | 1 (2.3%) | 2 (2.6%) | 1 (0.8%) | 2 (7.4%) | 0 (0.0%) |
| | Men | 13 (1.5%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) |
| | | | | | | | | |

^{*}Criteria for reperfusion: chest pain >30 minutes, but >12 hours AND, ST elevation >1mm in ≥2 consecutive leads or new left bundle branch block

ACE, angiotensin-converting enzyme; ARB, angiotensin-receptor blocker; CABG, coronary artery bypass graft surgery; CAD, coronary artery disease; CHD, congestive heart disease; DBP, diastolic blood pressure; IQR, interquartile range; LV, left ventricular; NSTEMI, non-ST-elevation myocardial infarction; PCI, percutaneous coronary intervention; PSS-I, Posttraumatic symptom scale; SBP, systolic blood pressure; SD, standard deviation; SF-12, 12-Item Short Form Health Survey; STEMI, ST-elevation myocardial infarction

| Appendix 1. Classification by VIRGO Taxonomy and Third Universal Definition of MI with Case Examples |
|------------------------------------------------------------------------------------------------------|
|------------------------------------------------------------------------------------------------------|

| | VIRGO | Universal | Clinical Scenarios |
|------------|----------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Taxonomy | Definition | |
| | | • | ajor) epicardial vessel |
| Case 1 | 1 | | 41 y F, migraines and + family history, p/w migraine and chest pain. AWSTEMI; LAD totally occluded s/p PCI; no other significant disease. EF 25% to 55%. |
| Case 2 | 1 | 1 | 53 y F, HTN, HL, CKD, p/w chest pain and hypertensive crisis. BP 233/166. IWSTEMI; LCX 90% occluded; OM2 100% occluded s/p PCI and 100% LAD stenosis with recanalization, s/p staged PCI. |
| Case 3 | 1 | 1 | 50 y M, psoriasis and + family history, p/w crushing CP; NSTEMI; LAD with sequential 95% lesions - s/p PCI; no other significant disease |
| Case 4 | 1 | 1 | 54 y F, smoker, p/w chest pain. IWSTEMI; posterior LAD with 80% ulcerated lesion - s/p PCI. Mid-RCA 60-70%; no other significant disease |
| Case 5 | 1 | | 49 y F, smoker, with hyperlipidemia and anxiety, p/w 2 weeks of intermittent chest pain and dyspnea. IWSTEMI with 3rd degree heart block. RCA 100% occluded - s/p PCI; no other disease |
| | | | evidence supporting myocardial oxygen supply-demand mismatch |
| Case 6 | 2a | 2 | 55 y F, DM, HTN, obesity p/w chest pain and severe hypertension. BP 190/112; NSTEMI with dynamic ECG; 2V non-significant disease (RCA 40-65%; LAD with 60-70% lesions); no culprit; medically managed |
| Case 7 | 2a | 2 | 47 y F, HTN, seizures, cocaine and heroine abuse, p/w chest pain, dyspnea and diaphoresis. BP 142/110, p. 114. NSTEMI. Single vessel disease with CTO of RCA; medically managed |
| Case 8 | 2a | 2 | 48 y F, smoker, migraines and + family history, p/w chest pain. BP 187/94. NSTEMI with dynamic ECG. PDA 50-60% - no response to IC nitroglycerin. OM1 30% stenosis. Dyskinesis in inferoapical wall; medically managed |
| Case 9 | 2a | 2 | 54 y F, DM, HTN, prior stroke, p/w chest pain and severe HTN. BP 173/127. NSTEMI; branch of ramus 80% stenosed; LAD tortuous with 30% lesion; RCA tortuous. LVEF 35% w/ large anteroapical aneurysm |
| Case 10 | 2a | | 38 y F, smoker, HTN, HL, CKD and CAD-prior PCI 9 days prior; p/w severe chest pain and BP 181/116. NSTEMI with dynamic ECG; Patent stent in LCX. Unchanged 50% LAD; Unchanged 70% Ramus |
| | | • | out evidence supporting myocardial oxygen supply-demand mismatch |
| Case 11 | | , | 48 y M, smoker, polysubstance use, p/w chest pain. NSTEMI; cath with multivessel disease. Left main 50%; Diagonal 75%; LCX diffuse disease; RCA with CTO. Normal LV systolic function |
| Case 12 | 2b | | 44 y F, smoker, p/w CP. NSTEMI; distal LAD 60% stenoses, otherwise minor luminal irregularities. ECHO with severe apical hypokinesis |
| Case 13 | 2b | | 54 y F, HTN, p/w chest pain while carrying grandchild on beach. NSTEMI; ostial D1 lesion 50% stenosed; otherwise normal coronary arteries. ADD ECHO |
| Case 14 | 2b | | 53 y F, fibromyalgia, p/w crushing chest pain. Husband critically ill in ICU. NSTEMI. Cath 40% ostial LM; RPL 60%; otherwise luminal irregularlities. ADD ECHO |
| Case 15 | 2b | | 34 y F, CAD - s/p AMI and PCI; p/w chest pain. NSTEMI. Stress test: large anterolateral anterior defect, partially reversible. Cath with 50% in-stent restonisis of LAD; pOM1 80% lesion; pRCA 60%; medically managed. |
| | | | with evidence supporting myocardial oxygen supply-demand mismatch |
| Case 16 | 3a | 2 | 52 y F, COPD, fibromyalgia, seizures p/w altered mental status, pneumonia, COPD exac. NSTEMI; LAD 30% hazy lesion; RCA 40% eccentric lesion. Neither considered cultprit. ECHO with RV failure |
| Case 17 | 3a | 2 | 44 y F, HTN, DM, h/o pulmonary embolism, obesity, p/w chest pain and dyspnea with exertion. BP 200s systolic. NSTEMI. Cath with minimal disease. Hypokinesis of basal inferior wall, NI LVEF |
| Case 18 | 3a | | 54 y M, COPD, p/w respiratory failure requiring intubation, fever, BP 187/108, p. 144. Cath with minimal stenosis of AV groove; otherwise normal. LVEF 30% with septal and lateral wall motion abnormalities |
| Case 19 | 3a | 2 | 38 y F, morbid obesity, + family history, p/w back pain radiating to chest. BP 151/105, p. 121. NSTEMI. Cath 30% RCA, mild anterior hypokinesis |
| Case 20 | 3a | 2 | 36 y F, smoker, HTN, HL, DM with chest pain x 20 years; now worse. BP 170/111. Stress test: chest pain, no ECG changes, but with rising troponins. NSTEMI. Cath with 20% LAD lesion, otherwise normal. ECHO with LVH and normal LVEF |
| Non-obst | | | without evidence supporting myocardial oxygen supply-demand mismatch |
| Case 21 | 3b | | 26 y F, with h/o gestational HTN, p/w chest pain that awoke her from sleep at 5am. NSTEMI. No evidence of pulmonary embolism. Normal coronaries. ADD ECHO. Rheumatologic evalutation negative. Thrombilia eval pending at time of discharge. |
| Case 22 | 3b | | 54 y F, with + family history, p/w chest pain while on treadmill. NSTEMI. Normal coronaries. Distal inferior hypokinesis. Empirically treated for vasospasm |
| Case 23 | 3b | | 48 y F, smoker, p/w fever, chills, vomiting. ECG with bigeminy. NSTEMI. Normal coronaries. Normal LVEF with mild inferior hypokinesis |
| Case 24 | 3b | | 37 y F, with obesity, chronic back pain, + family history, p/w chest and back pain. NSTEMI. Normal coronaries. Normal LV systolic function |
| Case 25 | 3b | | 51 y F, HTN, HL, p/w chest pain in setting of witnessing natural disaster. NSTEMI. Normal coronaries. LV gram EF 25%; aknesis of anterior and inferior walls small portion of apex contracting normally |
| Other disc | crete pathophy | | anism (e.g., Vasospasm, Dissection; Embolism; Takotsubo) |
| Case 26 | 4 - Dissection | 1 | 41 y F, marathon runner, p/w chest pain at rest. NSTEMI. Spontaneous dissection of 1st OM and 2nd OM arteries with 90% and 100% stenosis, respectively; otherwise normal. NI LVEF with inferior hypokinesis. Medically managed |
| Case 27 | 4 - Vasospasm | 2 | 50 y F, smoker, + family history, p/w chest pain. AWSTEMI. Initial cath with ostial 90% LAD and 75-50% LCX. Spasm of b/l femoral arteries prevented PCI. 2nd cath with mild disease that responded to IC nitro. LVEF 39% with global hypokinesis |
| Case 28 | 4 - Vasospasm | 2 | 52 y F, anxiety, panic attacks, TIA symptoms, p/w chest pain after learning of child's death; ECG: diffuse ST depressions; LAD tubular stensosis improved with IC nitro; LV gram EF 35-40%; f/u ECHO with normal LVEF |
| Case 29 | 4 - Vasospasm | 2 | 47 y F, HTN, p/w chest pain while walking. ECG with bigeminy. NSTEMI. Mid-LAD 50% stenosis relieved with IC nitro; otherwise normal coronaries. LVEF 35-40% with anterior and apical hypokinesis. F/U ECHO with EF 45-50% |
| Case 30 | 4 - Dissection | 1 | 52 y F , DM, HTN, CAD - s/p PCI, p/w chest pain and vomiting. Found to be in DKA. IWSTEMI. Cath with dissection of RPL (otherwise no different than prior cath 3 months ago). LVEF 55% with inferior hypokinesis |
| | | | or more classes above, depending on interpretation of description |
| Case 31 | | • | 50 y F, p/w chest pain x 2 days following death of friend. NSTEMI. LAD 40% with distal staining concerning for recent plaque rupture. ECHO LVEF 20-25%; hyopkinesis of midseptum; mid an terohedieral and basal anterior and inferior walls. Apex n |
| Case 32 | | - | 49 y F, DM, HTN, HL, + family hx p/w chest pain. NSTEMI. Normal coronaries except for possible D1 hazy lesion; Medical team uncertain of this being the culprit. Normal LV systolic function |
| Case 33 | 5 | 1/Unclassified | 38 y M, smoker, p/w chest pain. IWSTEMI with associated q waves. Cath within 6 hours of pain onset. Coronaries normal except late filling of extreme distal portion of superior division of 1st OM. LV gram with mild hypokinesis of inferior wall. EF 60%. "Possible culprit" |
| Case 34 | | - | 37 y F, p/w chest pain > 1day. AWSTEMI. Distal LAD very small lumen that "tailed off" with faint collaterals; possibly occluded; otherwise normal coronaries. ECHO mid-septal/anteroseptal/anterior and apical septal/anterior/inferior akinesis EF 35-40% |
| Case 35 | 5 | 1/Unclassified | 52 y F, Asian, breast cancer, borderline HTN p/w chest pain. EKG: intermittent BBB. Distal LAD with sudden tapering into hair-like vessels; diffusely diseased and subotally occluded; LCX and RCA also with terminal portions that are small and tortuous. Apical dyskinesis EF 50% |