Supplemental Table 1

Characteristics of patients with SAH-induced neurogenic stunned myocardium

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | Comorbidities | | | Clinical presentation | | |  | ECG findings | | | | | | | | | | | |
| Reference | Age | Sex | Cad | Dm | Htn | AMS | HA | CP | Fisher Grade | TWA | ST  | QT Pro | CE  Elev | EF (%) | EF (%) On FU | NSM Type | Cor Angio | Clip/ Coil | SAH Tx Delay | Hospital Mortality | mRS Score | |
| Ono et al, 2004[1](#_ENREF_1) | 66 | f | n | n | n | y | n | n | 4 | y | y | y | y | 28 | nl | classic | y | clip | n | n | na | |
| Ennezat et al, 2005[2](#_ENREF_2) | 34 | m | n | n | n | y | y | y | 4 | y | y | n | y | 30 | na | var- invert | y | none | n | y | 6 | |
| de Chazal[3](#_ENREF_3" \o "de Chazal, 2005 #4706) | 55 | f | n | n | n | y | y | n | WFNS grade 4 | n | y | n | n | 33 | 60 | classic | y | coil | yes | n | Cognitive impairment | |
|  | 29 | m | n | n | n | y | y | n | 4 | y | n | n | y | 20 | na | var- invert | n | coil | n | y | 6 | |
| Deininger et al, 2006[4](#_ENREF_4) | 23 | m | na | na | na | y | n | n | 4 | y | y | n | y | 15 | 65 | classic | n | none | n | n | 5\* | |
| Lee et all, 2006[5](#_ENREF_5) | 44 | f | n | n | n | y | n | n | HH 2 | y | n | n | na | 40 | 67 | classic | n | clip | n | n | 0 | |
|  | 71 | f | n | n | n | n | n | n | HH 3 | y | n | n | na | 46 | 55 | classic | n | clip | n | n | 6 | |
|  | 57 | f | n | y | y | y | n | n | HH 3 | y | y | n | y | 55 | 68 | classic | n | clip | n | n | na | |
|  | 66 | f | n | n | n | y | n | n | HH 3 | n | n | n | y | 30 | 40 | classic | n | coil | n | n | 1 | |
|  | 54 | f | n | y | y | y | n | n | HH 4 | y | n | n | y | 30 | 54 | classic | n | coil | n | n | 0 | |
|  | 55 | f | n | n | n | n | n | n | HH 3 | y | n | n | y | 45 | 50 | classic | n | coil | n | y | 6 | |
|  | 38 | f | n | n | y | y | n | n | HH 4 | y | n | n | y | 25 | 55 | var- diffuse | n | clip | n | n | 2 | |
|  | 55 | f | n | n | y | y | n | n | HH 4 | n | n | n | y | 33 | 55 | var- diffuse | n | coil | n | n | 0 | |
| Inoue et al, 2006[6](#_ENREF_6) | 56 | m | n | n | n | y | y | na | na | y | y | n | y | 20 | 64 | classic | y | clip | n | n | 3\* | |
|  | 48 | f | n | n | n | y | y | na | na | n | y | n | y | 21 | 62 | var- diffuse | y | clip | n | n | 4\* | |
| Otomo et al, 2006[7](#_ENREF_7) | 74 | f | n | n | n | y | n | n | HH 4 | y | n | n | y | 13 | 60 | classic | n | clip | n | n | na | |
|  | 75 | f | n | n | y | y | n | n | HH 2 | y | n | n | y | 26 | 70 | classic | n | clip | n | n | na | |
| Miljak et al, 2007[8](#_ENREF_8) | 40 | f | n | n | n | y | y | n | 4 | y | y | n | y | 30\* | na | classic | y | none | y | y | 6\* | |
| D’Aloia et al, 2007[9](#_ENREF_9) | 69 | f | n | n | y | y | n | y | na | y | y | y | y | 35 | nl | classic | y | clip | y | n | 0\* | |
| Hakeem et all, 2007[10](#_ENREF_10) | 64 | f | n | n | n | y | n | y | 4 | y | y | y | y | 25 | nl | classic | n | na | n | n | na | |
| Inoue et all, 2007[11](#_ENREF_11) | 53 | m | n | n | n | y | n | n | na | y | y | n | y | 50 | 80 | var- mid | y | coil | n | n | 0\* | |
| Fujita et al, 2007[12](#_ENREF_12) | 35 | f | na | na | na | na | y | y | 1 | n | n | n | n | 33 | na | classic | n | na | n | n | 0\* | |
|  | 60 | f | na | na | na | na | na | n | 3 | y | y | na | y | 10 | na | classic | n | na | n | n | 2\* | |
|  | 72 | f | n | n | n | y | y | n | 3 | y | y | na | y | 51 | nl | classic | y | clip | n | n | 0\* | |
|  | 66 | f | n | n | n | na | na | n | 4 | y | y | na | y | 21 | na | classic | n | na | y | n | 2\* | |
|  | 64 | f | n | n | y | na | na | n | 3 | y | y | na | y | 14 | na | classic | n | clip | y | y | 6\* | |
|  | 79 | f | n | n | n | na | na | n | 4 | y | n | na | y | 20 | na | classic | n | na | y | y | 6\* | |
| Bonnemeier et al, 2008[13](#_ENREF_13) | 62 | m | n | na | na | y | y | n | ICH | y | y | n | y | 29 | na | classic | y | na | n | n | na | |
| Rahimi et al, 2008[14](#_ENREF_14) | 70 | f | y | y | na | y | na | na | ICH | y | y | n | y | 51 | nl | classic | y | none | y | n | na | |
| Tommaso et al, 2008[15](#_ENREF_15) | 36 | f | n | n | n | y | y | y | 4 | y | n | n | y | na | nl | classic | y | coil | n | n | 0\* | |
| Yamaguchi et al, 2008[16](#_ENREF_16) | 57 | f | n | n | n | n | y | n | 4 | y | y | n | n | 32 | 56 | var- mid | y | coil | n | n | na | |
| Das et al, 2009[17](#_ENREF_17) | 57 | f | n | n | n | y | y | n | 5 | y | n | n | y | na | nl | classic | y | coil | n | n | na | |
| Franco et al, 2010[18](#_ENREF_18) | na | f | na | na | na | y | na | na | 4 | y | n | y | y | 20 | 45 | classic | n | coil | n | n | na | |
| Suzuki et al, 2010[19](#_ENREF_19) | 63 | f | n | n | y | y | n | n | 3 | y | y | n | y | 50 | nl | classic | n | coil | n | n | 0\* | |
| Cardin et al, 2011[20](#_ENREF_20) | 64 | f | n | na | na | y | n | n | na | na | y | y | y | na | na | var- mid | y | na | na | y | 6 | |
| Hamdan et al, 2010[21](#_ENREF_21) | 55 | f | n | na | y | n | y | y | na | na | y | n | y | 35 | nl | classic | y | clip | n | n | na | |
| Smedra et al, 2010[22](#_ENREF_22) | 57 | m | n | na | na | y | na | na | na | y | y | n | y | 25 | na | classic | y | none | n | y | 6 | |
| Konrad et al, 2010[23](#_ENREF_23) | 77 | f | n | na | na | na | na | na | na | na | na | na | y | na | nl | classic | y | coil | y | n | 5\* | |
| Abed et al, 2010[24](#_ENREF_24) | 62 | f | y | na | y | y | na | na | na | y | na | na | y | na | nl | var-invert | y | coil | y | n | na | |
| Ando et al, 2010[25](#_ENREF_25) | 43 | f | n | n | n | y | y | n | 4 | y | y | y | y | 35 | 60 | classic | y | coil | yes | n | na | |
|  | 64 | f | n | n | n | y | y | n | 4 | y | y | y | y | 35 | 60 | classic | y | coil | yes | n | na | |
| Boes et all, 2011[26](#_ENREF_26) | 64 | f | n | na | na | y | na | na | 3 | na | na | na | na | 20 | nl | classic | y | clip | y | n | 5\* | |
| Bagga et al, 2011[27](#_ENREF_27) | 65 | f | n | n | n | y | y | y | 3 | n | y | n | y | 35 | nl | classic | y | clip | y | n | na | |
| Gaibazzi t al, 2011[28](#_ENREF_28) | na | na | na | na | na | na | na | na | na | na | na | na | na | na | na | var-mid | na | na | na | na | na | |
|  | na | na | na | na | na | na | na | na | na | na | na | na | na | na | na | var-invert | na | na | na | na | na | |
| Santana-Cabrera et al, 2012[29](#_ENREF_29) | 47 | f | n | n | n | y | y | n | 4 | y | y | y | y | 35 | 60 | classic | n | clip | yes | n | na | |
| Inamasu et al, 2012[30](#_ENREF_30) | 62 | f | n | n | n | y | y | n | 3 | Y | y | Y | na | 35 | 60 | classic | na | clip | N | N | 5 | |
|  | 70 | f |  |  |  | y | y | n | 4 | N | y | Y | na | 35 | 60 | classic | na | coil | N | N | 4 | |
|  | 59 | m | n | n | n | y | y | n | 4 | N | y | Y | na | 35 | 60 | classic | na | coil | N | N | 5 | |
|  | 58 | f |  |  |  | y | y | n | 3 | Y | y | Y | na | 35 | 60 | classic | na | clip | N | N | 4 | |
|  | 46 | f | n | n | n | y | y | n | 4 | N | y | Y | na | 35 | 60 | classic | na | coil | N | Y | 1 | |
|  | 44 | f |  |  |  | y | y | n | 4 | N | y | N | na | 35 | 60 | classic | na | coil | N | N | 4 | |
|  | 59 | f | n | n | n | y | y | n | 4 | N | y | Y | na | 35 | 60 | classic | na | coil | N | Y | 1 | |
|  | 52 | m |  |  |  | y | y | n | 4 | N | y | N | na | 35 | 60 | classic | na | coil | N | y | 1 | |
|  | 54 | m | n | n | n | y | y | n | 4 | Y | y | Y | na | 35 | na | classic | na | NS | Y | Y | 1 | |
|  | 76 | m |  |  |  | y | y | n | 4 | N | y | N | na | 35 | na | classic | na | NS | Y | Y | 1 | |
|  | 62 | m | n | n | n | y | y | n | 4 | N | y | N | na | 35 | na | classic | na | NS | Y | Y | 1 | |
|  | 75 | f |  |  |  | y | y | n | 4 | N | y | Y | na | 35 | na | classic | na | NS | Y | Y | 1 | |
|  | 64 | f | n | n | n | y | y | n | 4 | n | y | Y | na | 35 | na | classic | na | NS | Y | Y | 1 | |
|  | 79 | f | n | n | n | y | y | n | 4 | n | y | y | na | 35 | na | classic | na | NS | Y | y | 1 | |
| Shoukar et al, 2013[31](#_ENREF_31) | 63 | f | n | n | y | y | y | n | HH 3 | n | y | n | y | 40 | 55 | var- invert | y | coil | n | n | na | |
|  | 44 | f | n | n | n | y | y | n | HH5 | y | y | n | y | 20 | na | var- invert | y | ns | y | y | 1 | |
|  | 47 | f | n | n | n | y | y | n | HH5 | y | y | y | y | 20 | na | var- invert | y | ns | y | y | 1 | |
|  | 43 | f | n | n | y | y | y | n | HH5 | y | y | y | y | 20 | 60 | var- invert | y | ns | y | y | 1 | |
| Waller et al, 2013[32](#_ENREF_32) | 46 | f | n | n | y | y | n | n | HH3 | n | y | n | y | 25 | 65 | var- invert | n | coil | n | n | good | |
| Edwards et al., 2013 | 23 | f | n | n | n | y | y | n | 3 | n | n | n | y | 25 | 55 | var- invert | n | coil | n | n | 2 | |

This supplemental table shows detailed characteristics of patients with SAH-induced neurogenic stunned myocardium. In August 2014 we identified relevant publications through a PubMed search using the keywords “tako-tsubo cardiomyopathy”, “takotsubo”, “takotsubo cardiomyopathy”,“apical ballooning syndrome”, “stress-induced cardiomyopathy”, “broken heart syndrome”, “neurogenic stunned myocardium” and “ampulla cardiomyopathy” in combination with “variant form”, “inverse form“, “basal form” and “subarachnoid hemorrhage”. Further studies were sought by means of manual search of secondary sources, including references from primary articles. For each case, we collected (when described) the demographic and clinical information, including age, sex, neurological diagnosis, electrocardiographic (ECG) changes, cardiac enzymes, LV ejection fraction (EF) and the detail of wall motion abnormalities.

*a.* AMS, altered mental status; CAD, coronary artery disease; Cor angio, coronary angiography performed; CP, chest pain; CE elev, cardiac enzymes elevated (includes troponin, CK, and CKMB); DM, diabetes mellitus; EF, ejection fraction; f,female; FU, follow-up; HA, headache; HH, Hunt & Hess grade; HTN, hypertension; m,male; mRS, Modified Rankin Scale; n,no; na,not available; nl,normal form; NSM, neurogenic stunned myocardium; QT pro, QT prolongation; ST , ST segment changes; TWA, T-wave abnormalities; var,variant form; y,yes

*b.* ^ = reported as fractional shortening and not ejection fraction

*c.* \* = inferred value based on history

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