**Supplementary Table 1 – Demographic and clinical characteristics of the patients**

aDefined as time between surgery and leak detection. b Data about 1 patient was not available. c Data about 2 patients was not available. d Data about 4 patients was not available. e Data about 2 patients was not available. f In 28 patients (82%), leak size was smaller than 1/3 of anastomotic circumference; 6 patients (18%) presented with a leak size between 1/3 and 2/3 of esophageal circumference. APC: argon plasma coagulation; CS: contrast study; CT: computed tomography scan; E: upper endoscopy.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Author, year | Age, years – mean ± SD | Male – n (%) | Obesity – n (%) | Diabetes mellitus – n (%) | Tumor stage III or IV – n (%) | Time of AL diagnosisa, days - mean ± SD | Method of diagnosis | AL location | | | AL circunference > 25% - n (%) | AL size, cm - mean ± SD and/or median (range) | Sepsis before treatment – n (%) |
| Cervical – n (%) | Intrathoracic – n (%) | Abdominal – n (%) |
| Endoscopic treatment | | | | | | | | | | | | |  |
| Al-issa, M. A 2013 | - | - | - | - | - | - | CS, CT, E | - | - | - | - | - | - |
| Berlth, F. 2018  - EVT  - SEMS | 64.7 ± 9.8  64.2 ± 9.4 | 29 (85.3)  63 (81.8) | - | - | - | 12.6 ± 13.7  8.5 ± 4.6 | CS, CT, E | 0 (0)  1 (1.3) | 29 (85.3)  72 (93.5) | 5 (14.7)  4 (5.2) | 8 (26.7)d  12 (16.0)e | -  - | -  - |
| Bohle, W. 2020 | 65.4 ± 8.1 | 26 (76.5) | - | 8 (23.5) | - | 9.3 ± 6.5 | E | - | - | - | f | - | - |
| Böhm, G. 2010 | - | - | - | - | - | 11 ± 8 | E | - | - | - | - | - | - |
| Dai, Y. Y. 2009 | 63 ± NA | 18 (81.8) | - | - | - | 6.5 ± NA | CS, E | - | - | - | - | - | - |
| Feith, M. 2011 | 60.4 ± 13.0 | - | - | - | - | 8.4 ± 3.5 | E | - | - | - | - | - | - |
| Fernandez, A. 2015 | 63.8 ± 9.1 | 11 (78.6) | - | - | - | - | CS | - | - | - | - | - | - |
| Freeman, R. K. 2015 | 61 ± 19 | - | - | - | - | - | CS | 0 (0) | 45 (100) | 0 (0) | - | - | 1 (2.2) |
| Gonzalez, J.M. 2016 | 61.7 ± 8.9 | 31 (88.6) | - | - | - | 8.2 ± 5.6 | CS, CT, E | 16 (48.5)c | 17 (51.5)c | 0 (0)c | - | - | - |
| Hwang, J.J. 2016   * EVT * Stent | 71,1 ± 4.7  67.4 ± 8.1 | 5 (71.4)  9 (81.8) | -  - | -  - | -  - | -  - | -  - | -  - | -  - | -  - | -  - | 0.81 (0.3 – 2.0)  0,66 (0,2 – 2.0) | -  - |
| Kauer, W. K. 2007 | - | - | - | - | - | - | CS, E | 0 (0) | 12 (100) | 0 (0) | - | - | - |
| Kim, Y. J. 2012 | 62.8 ± 10.7 | 24 (72.7) | - | - | 12 (36.4) | 8.6 ± 5.4 | CS, CT, E | 0 (0) | 0 (0) | 33 (100) | - | 1.7 (0.5-4) | - |
| Kucukay, F. 2012 | 47.4 ± 7.9 | - | - | - | 10 (71.4) | 5.4 ± 1.8 | CS, E | - | - | - | 14 (100) | - | 14 (100) |
| Leenders, B. J. M. 2013 | 60.4 ± 11.1 | 9 (60.0) | - | - | - | - | - | 12 (80.0) | 3 (20.0) | 0 (0) | - | - | - |
| Licht, E. 2015 | - | - | - | - | - | 8.9 ± 5.8 | CS, CT | - | - | - | - | - | - |
| Ma, H. 2018   * - APC * - Clips * - Stents | 63.2 ± 6.97 | 127 (80.9) | - | - | - | - | CS, E | 2 (1.3) | 155 (98.7) | 0 (0) | - | 0.7 ± 0.4  1.0 ± 0.2  1.7 ± 0.1 | - |
| Mennigen, R. 2015 | 57.0 ± 9.8 | 14 (93.3) | - | - | - | 11.8 ± 11.5 | E | 0 (0) | 15 (100) | 0 (0) | - | - | - |
| Min, Y. W. 2019 | 66.1 ± 6.4 | 20 (100) | - | - | - | 14.7 ± 8.0 | CS, E | 7 (35.0) | 13 (65.0) | 0 (0) | - | 1.75 (0.5-3) | - |
| Schorsch, T. 2014 | 69.4 ± 10.1 | 14 (70.0) | - | - | - | 9.9 ± 5.4b | CT, E | - | - | - | - | 1.75 ± 1.2  1,25 (0.5-4) | - |
| Schubert, D. 2006 | 61.2 ± 12.4 | 17 (65.4) | - | - | - | 6.7 ± 2.8 | CS, E | 0 (0) | 26 (100) | 0 (0) | 18 (69.2) | - | - |
| Wu, G. 2017 | 60.8 ± 7.0 | 19 (70.4) | - | - |  | - | CS, CT | 27 (100) | 0 (0) | 0 (0) | - | - | - |
| Surgical treatment | | | | | | | | | | | | |  |
| Lang, H. 2000 | - | - | - | - | - | - | CS | - | - | - | - | - | - |
| Lee, D. H. 2012 | 61.3 ± 5.9 | 10 (100) | - | - | - | 12.0 ± 8.6 | CS | 9 (90.0) | 1 (10.0) | 0 (0) | - | - | - |
| Page, R.D. 2004 | - | - | - | - | - | 9.3 ± 5.6 | CS, E | - | - | - | - | - | 11 (64.7) |
| Endoscopic and surgical treatment | | | | | | | | | | | | |  |
| Angulo, D.R. 2018 | 64.5 ± 9.8 | 10 (100) | - | - | 6 (60.0) | - | - | 0 (0) | 10 (100) | 0 (0) | - | - | - |
| Etxaniz, S. L. 2013  - Endoscopy  - Surgery | - | - | - | - | - | - | CS, CT, E | 10 (100) | 0 (0) | 0 (0) | - | - | 2 (22.2)  1 (100) |
| Fumagali, U. 2018 | - | - | - | - | - | - | - | 0 (0) | 40 (100) | 0 (0) | - | - | - |
| Lee, S. 2015  - Endoscopy  - Surgery | 62.7 ± 9.0  66.3 ± 7.7 | 16 (64.0)  27 (77.1) | - | - | - | 9.8 ± 5.5  17.9 ± 24.0 | CS, CT | - | - | - | - | - | - |
| Lee, S. R. 2018 | 58.9 ± 10.7 | 5 (50.0) | 2 (20.0) | 1 (10) | 4 (40.0) | 3.9 ± 1.7 | CS, CT, E | - | - | - | 1 (10.0) | - | - |
| Milek, T. 2016 | 64 ± NA | 17 (73.9) | - | 0 (0) | - | - | CS, CT | - | - | - | - | - | - |
| Schniewind, B. 2013 | - | - | - | - | - | - | CS, E | 7 (14,9) | 40 (85.1) | 0 (0) | - | - | - |
| Schweigert, M. 2014  - Endoscopy  - Surgery | 64.8 ± NA | - | - | - | - | - | CT, E | 0 (0) | 49 (100) | 0 (0) | - | - | -  14 (48.3)  16 (80.0) |