|  |  |  |  |
| --- | --- | --- | --- |
| **Supplementary table 2.** Comparisons of ESD cases between with and without clip-and-thread traction method (n = 303) | | | |
|  | No traction method  (n = 258) | Traction Method  (n = 45) | *P*-value |
| Sex, n (%) |  |  | 0.065 |
| Male | 227 (88.0) | 35 (77.8) |  |
| Female | 31 (12.0) | 10 (24.4) |  |
| Age |  |  | 0.166 |
| ≤ 75 years | 197 (76.4) | 30 (66.7) |  |
| >75 years | 61 (23.6) | 15 (33.3) |  |
| Tumor location, n (%) |  |  | 0.069 |
| Cervical/upper thoracic | 28 (10.9) | 1 (2.2) |  |
| Middle thoracic/lower thoracic/abdominal | 230 (89.1) | 44 (97.8) |  |
| Tumor localization, n (%) |  |  | 0.624 |
| Anterior/posterior /right wall | 210 (81.4) | 38 (84.4) |  |
| Left wall | 48 (18.6) | 7 (15.6) |  |
| Macroscopic type, n (%) |  |  | 0.942 |
| Elevated/flat | 96 (37.2) | 17 (37.8) |  |
| Depressed | 162 (62.8) | 28 (62.2) |  |
| Longitudinal tumor size, n (%) |  |  | 0.003 |
| ≤ 30 mm | 207 (80.2) | 27 (60.0) |  |
| > 30 mm | 51 (19.8) | 18 (26.1) |  |
| Circumferential extent of the tumor, n (%) |  |  | 0.033 |
| ≤ 1/2 | 169 (65.5) | 22 (48.9) |  |
| > 1/2 | 89 (34.5) | 23 (51.1) |  |
| Preoperative diagnosis of histological type, n (%) |  |  | 1.000 |
| Squamous cell carcinoma | 235 (91.1) | 41 (91.1) |  |
| Adenocarcinoma | 23 (8.9) | 4 (8.9) |  |
| Preoperative diagnosis of invasion depth, n (%) |  |  | 0.009 |
| T1a | 227 (88.0) | 33 (73.3) |  |
| T1b | 31 (12.0) | 12 (26.7) |  |
| Previous radiotherapy for esophageal cancer, n (%) |  |  | 0.095 |
| Absent | 231 (89.5) | 44 (97.8) |  |
| Present | 27 (10.5) | 1 (3.6) |  |
| Metachronous lesion close to post ESD scar, n (%) |  |  | 0.271 |
| Absent | 246 (95.3) | 41 (91.1) |  |
| Present | 12 (4.7) | 4 (8.9) |  |
| Operator’s skill |  |  | 0.084 |
| Expert | 212 (82.2) | 32 (71.1) |  |
| Trainee | 46 (17.8) | 13 (28.9) |  |
| ESD outcomes |  |  |  |
| Difficult cases (procedure time > 120 min) | 39 (15.1) | 12 (26.7) | 0.056 |
| Incomplete resection | 5 (1.9) | 1 (2.2) | 1.000 |
| Esophageal perforation | 3 (1.2) | 1 (2.2) | 0.476 |
| *ESD, endoscopic submucosal dissection*  *T1a, tumor confined to the muscularis mucosa; T1b, tumor infiltrating into the submucosa* | | | |