**SUPPLEMENT**

|  |  |  |
| --- | --- | --- |
| Study | Rebleeding Rate in EO Group | Rebleeding Rate in PTAE Group |
| Lau 2019 | 14/123 | 6/96 |
| Laursen 2014 | 8/56 | 1/31 |
| Mille 2015 | 5/47 | 6/55 |
| Kamiski 2017 | 11.50 | 3/25 |
| Kamiski 2019 | 50/341 | 2/58 |
| Total | 88/617 (14.3%) | 18/265 (6.8%) |

**S. Table 1**: Rebleeding rate between EO (14.3%) and PTAE (6.8%) groups. EO: endoscopy only. PTAE: prophylactic transcatheter embolization

|  |  |  |
| --- | --- | --- |
| Study | Need of Surgical Intervention in EO Group | Need of Surgical Intervention in PTAE Group |
| Lau 2019 | 1/123 | 0/96 |
| Laursen 2014 | 0/56 | 0/31 |
| Mille 2015 | 0/47 | 0/55 |
| Kamiski 2017 | 17/50 | 2/25 |
| Kamiski 2019 | 71/341 | 6/58 |
| Total | 86/617 (14.4%) | 8/265 (3.0%) |

**S. Table 2**: Pooled rate of surgical intervention after EO (86/617, 14.4%) or PTAE (8/265, 3%). EO: endoscopy only. PTAE: prophylactic transcatheter embolization.

|  |  |  |
| --- | --- | --- |
| Study | Mortality in EO Group | Mortality in PTAE Group |
| Lau 2019 | 5/123 | 0/96 |
| Laursen 2014 | 8/56 | 1/31 |
| Mille 2015 | 5/47 | 7/55 |
| Kamiski 2017 | 8/50 | 1/25 |
| Kamiski 2019 | 28/341 | 3/58 |
| Total | 54/617 (8.8%) | 12/265 (4.5%) |

**S. Table 3**: Mortality rate between EO (8.8%) and PTAE (4.5%) groups. EO: endoscopy only. PTAE: prophylactic transcatheter embolization.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Clinical Variable | Study Number | Rebleed |  | Mortality |  |
|  |  | OR (95%CI) | P value | OR (95%CI) | P value |
| Hemoglobin (mean or median) |  |  |  |  |  |
|  <8.0 | 3c,d,e | 1.495 (0.694-3.219) | 0.305 | 1.458 (0.545-3.897) | 0.452 |
|  ≥8.0 | 2a,b | 3.642 (1.491-8.895) | 0.005 | 8.77 (3.344-22.997) | <0.001 |
| Percentage of NSAID use (excluding aspirin) |  |  |  |  |  |
|  ≥20% | 2c,d | 2.83 (0.91-8.87) | 0.074 | 8.0 (1.753-36.512) | 0.007 |
|  <20% | 2a,b | 1.49 (0.69-3.22) | 0.305 | 1.458 (0.545-3.897) | 0.452 |
| Follow-up |  |  |  |  |  |
|  30-day | 3a,b,c | 1.816 (0.896-3.683) | 0.098 | 2.209 (0.94-5.192) | 0.069 |
|  NS | 2d,e | 3.394 (1.268-9.082) | 0.015 | 8.981 (3.05-26.439) | <0.001 |

**S. Table 4:** Subgroup analysis of the efficacy of prophylactic transcatheter embolization in non-variceal upper gastrointestinal bleeding. OR: odds ratio. a: Mile 2015; b: Lau 2018; c :Laursen 2014; d: Kamiski 2017; e: Kamiski 2019

|  |  |  |
| --- | --- | --- |
| Study Omitted | Estimate | 95% Confidence Interval |
| Mille 2015  | 2.8606365  | 1.4813247 - 5.5242724 |
| Lau 2018  | 2.5500574  | 1.2757051 - 5.0974102 |
| Larusen 2014  | 2.1709063  | 1.2014346 - 3.9226725 |
| Kamiski 2017  | 2.401356  | 1.2882692 - 4.4761691 |
| Kamiski 2019  | 1.8683306  | .99629974 - 3.5036235 |
| Combined  | 2.3438137  | 1.328911 - 4.133808 |

**S. Table 5.1**: Sensitivity Analysis of the odds ratio of rebleeding risk after PTAE versus conservative management.



**S. Figure 1.1**: Sensitivity Analysis of the odds ratio of rebleeding risk after PTAE versus conservative management.

|  |  |  |
| --- | --- | --- |
| Study Omitted | Estimate | 95% Confidence Interval |
| Mille 2015  | 3.1018512  | 1.2680222 - 7.5877862 |
| Lau 2018  | 1.8166653  | .89489925 - 3.6878705 |
| Larusen 2014  | 1.8427566  | .89437312 - 3.7967956 |
| Kamiski 2017  | 1.8780748  | .91301966 - 3.8631861 |
| Kamiski 2019  | 2.3633807  | 1.0529445 - 5.3047128 |
| Combined  | 2.1060643  | 1.0676613 - 4.1544137 |

**S. Table 5.2**: Sensitivity Analysis of the odds ratio of mortality after PTAE versus conservative management.



**S. Figure 1.2**: Sensitivity Analysis of the odds ratio of rebleeding risk after PTAE versus conservative management.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Study** | **Selection** | **Comparability** | **Outcome** | **Overall**  |
| **Representativenessof the exposedcohort** | **Selection****of thenon-exposedcohort** | **Ascertainment****Of****Exposure** | **Outcome of****Interest was****not presentat start of study** | **Comparability of Cohorts on the Basis of the Design or Analysis** | **Assessment of****Outcome** | **Follow-Up Long Enough for Outcomes to Occur** | **Adequacy of Follow Up of Cohorts** |
| Mille 2005 | ★ | ★ | ★ | ★ | ★☆ | ★ | ★ | ★ | **8** |
| Kamiski 2017 | ★ | ★ | ★ | ★ | ★☆ | ★ | ★ | ☆ | **7** |
| Kamiski 2019 | ★ | ★ | ★ | ★ | ★☆ | ★ | ★ | ☆ | **7** |

**Supplement Table 6.1: Newcastle Ottawa Scale (NOS) of cohort studies was used to evaluate the quality for each eligible study.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Study | **Selection Bias** | **Performance Bias** | **Detection Bias** | **Attrition Bias** | **Reporting Bias** | **Other Bias** | **Total**  |
| Random Sequence Generation | Allocation Concealment | Blinding of Participants and Personnel | Blinding of Outcome Assessment | Incomplete Outcome Data | Selective Reporting | Many patients allocated to the treatment group did not end up receiving the treatment | Low on Risk of Bias |
| Lau  | Low | High | High | High | Low | Low | High  | 3/7 |
| Laursen | Low | High | High | High | Low | Low | High | 3/7 |

**Supplement Table 6.2: The Cochrane Collaboration’s tool for assessing risk of bias in randomized trials.**