**Supplement 2:**

1. **Number of infections according to RACHS-1 score category in the early and late postoperative period.**

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Number of different types of cardiosurgical procedures according to Risk adjustment for congenital heart surgery (RACHS-1) score without infection and with at least one infection in the early or late postoperative period.

|  |  |  |  |
| --- | --- | --- | --- |
| **Category of cardiosurgical procedure** | **Without infection** | **Early Infection** | **Late Infection** |
| **RACHS 1 and 2** | 85 | 11 | 6 |
|  | p=0.09 | p=0.5 | p=0.009 |
| **RACHS 3 and 4** | 88 | 10 | 18 |
|  | p=0.41 | p=0.83 | p=0.18 |
| **RACHS 5 and 6** | 16 | 1 | 6 |
|  | p=0.4 | p=0.7 | p=0.04 |
| **Overall** | 189 | 22 | 30 |
|  | p=0.25 | p=0.72 | p=0.007 |

Comparison of the frequency of cases without postoperative infection and cases with infection in the early and late postoperative period conditional on RACHS category using Fisher's exact test.

1. **Allocation of patients with and without infection in the early and late postoperative period according to procedures and Risk adjustment for congenital heart surgery score.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **RACHS Score** | **Procedure** | **Total number  of procedures (%) n=235** | **Cases with  no infection (%) n=189** | **Number of infections in the early postoperative period (%) n=22** | **Number of infections in the late  postoperative period (%)  n=34** |
| **Risk category 1** |  | **4 (2%)** | **3 (2%)** | **1 (5%)** | **0 (0%)** |
|  | Atrial septal defect surgery  (including atrial septal defect secundum, sinus venosus atrial septal defect, patent foramen ovale closure) | 4 | 3 | 1 | 0 |
| **Risk category 2** |  | **95 (40%)** | **82 (43%)** | **9 (41%)** | **6 (18%)** |
|  | Pulmonary valve replacement | 1 | 0 | 1 | 0 |
|  | Pulmonary outflow tract augmentation | 2 | 2 | 0 | 0 |
|  | Atrial septal defect and ventricular septal defect repair | 13 | 11 | 1 | 1 |
|  | Ventricular septal defect repair | 23 | 19 | 4 | 1 |
|  | Ventricular septal defect closure and pulmonary valvotomy or infundibular resection | 5 | 5 | 0 | 0 |
|  | Total repair of tetralogy of Fallot | 26 | 25 | 0 | 1 |
|  | Glenn shunt | 21 | 17 | 3 | 2 |
|  | Coarctation repair at age <30 d | 1 | 1 | 0 | 0 |
|  | Repair of pulmonary artery stenosis | 3 | 2 | 0 | 1 |
| **Risk category 3** |  | **76 (32%)** | **60 (32%)** | **5 (23%)** | **13 (38%)** |
|  | Mitral valve replacement | 1 | 1 | 0 | 0 |
|  | Tricuspid valvotomy or valvuloplasty | 10 | 8 | 1 | 1 |
|  | Repair of anomalous coronary artery without intrapulmonary tunnel | 2 | 1 | 0 | 2 |
|  | Right ventricular to pulmonary artery conduit | 2 | 2 | 0 | 0 |
|  | Repair of double-outlet right ventricle with or without repair of right ventricular obstruction | 4 | 3 | 0 | 1 |
|  | Repair of transitional or complete atrioventricular canal with or without valve replacement | 19 | 17 | 1 | 2 |
|  | Pulmonary artery banding | 2 | 2 | 0 | 0 |
|  | Repair of tetralogy of Fallot with pulmonary atresia | 1 | 1 | 0 | 0 |
|  | Systemic to pulmonary artery shunt | 19 | 12 | 1 | 6 |
|  | Arterial switch operation | 13 | 11 | 1 | 1 |
|  | Reimplantation of anomalous pulmonary artery | 1 | 1 | 0 | 0 |
|  | Annuloplasty | 1 | 0 | 1 | 0 |
|  | Excision of intracardiac tumor | 1 | 1 | 0 | 0 |
| **Risk category 4** |  | **38 (16%)** | **28 (15%)** | **6 (27%)** | **9 (26%)** |
|  | Aortic valvotomy or valvuloplasty at age ≤30 d | 4 | 3 | 1 | 0 |
|  | Repair of total anomalous pulmonary veins at age ≤30 d | 3 | 3 | 0 | 0 |
|  | Repair of transposition, ventricular septal defect, and subpulmonary stenosis (Rastelli) | 2 | 1 | 0 | 1 |
|  | Arterial switch operation with pulmonary artery band removal | 1 | 1 | 0 | 0 |
|  | Arterial switch operation with ventricular septal defect closure | 3 | 3 | 0 | 0 |
|  | Arterial switch operation with repair of subpulmonary stenosis | 1 | 1 | 0 | 0 |
|  | Repair of truncus arteriosus | 5 | 4 | 0 | 1 |
|  | Repair of hypoplastic or interrupted arch without ventricular septal defect closure | 8 | 6 | 1 | 2 |
|  | Repair of hypoplastic or interrupted aortic arch with ventricular septal defect closure | 6 | 5 | 1 | 3 |
|  | Transverse arch graft | 3 | 1 | 2 | 0 |
|  | Unifocalization for tetralogy of Fallot and pulmonary atresia | 2 | 0 | 1 | 2 |
| **Risk category 5** |  | **1 (0%)** | **1 (1%)** | **0 (0%)** | **0 (0%)** |
|  | Tricuspid valve repositioning for neonatal Ebstein anomaly at age ≤30 d | 1 | 1 | 0 | 0 |
| **Risk category 6** |  | **21 (9%)** | **15 (8%)** | **1 (5%)** | **6 (18%)** |
|  | Stage 1 repair of hypoplastic left heart syndrome (Norwood operation) | 16 | 12 | 1 | 4 |
|  | Stage 1 repair of nonhypoplastic left heart syndrome conditions | 2 | 2 | 0 | 0 |
|  | Damus-Kaye-Stansel procedure | 3 | 1 | 0 | 2 |
| *Source: Jenkins K Consensus - based method for risk adjustment for surgery for congenital heart diseases* | | | | | |

Percentages are relative frequencies of Risk adjustment for congenital heart surgery score categories in total and in cases with no infection or infection in the early or late postoperative period. Note that the sum of infections and no infections can be higher than the total number of procedures, since patients were sometimes having more than one infection in the early and late postoperative course