Introduction:
The positive effect of case volume on patient outcome seen in complex surgical procedures such as coronary artery bypass graft surgery has not been shown in heart transplantation (HT). The relationship between institutional case volume and patient outcome in adult HTs performed in Korea were analyzed.

Methods:
The Health Insurance Review and Assessment Service (HIRA) data from 2007 to 2016 was analyzed for in-hospital and long-term mortality, ICU length of stay, and hospital length of stay in patients undergoing HT, depending on the case volume of the institution.

Results:
A total of 852 heart transplantation were performed between 2007 and 2016. The operative mortality after HTs was 8.6% (73/852). The operative mortality in institutions performing more than 20 cases/year was 3.5% (13/367) as compared to 8.0% (23/287) in institutions performing 10-19 cases/year and 18.7% (37/198) in institutions performing less than 10 cases/year. After adjusting for other potential factors for operative mortality, HT at intermediate volume centers 2.41 (95% CI 1.19–4.87, p=0.014) and low volume centers 6.74 (95% CI 3.41–13.31, p<0.001) were identified as risk factors of in-hospital mortality.

Conclusion:
Our study results showed that HTs performed at institutions with higher case volume were associated with lower mortality.