## Trends and Outcomes of Treatment for Primary Rhegmatogenous Retinal Detachment: A 9-year Nationwide Population-based Study

何昭德

## 摘要

## **Abstract**

PURPOSE: To determine the trends and outcomes for treating primary rhegmatogenous retinal detachment (RRD) in a nationwide population-based study in Taiwan. METHODS: We collected admission data during the period of 1997-2005, from the Taiwan National Health Insurance Research Database, a source that covers over 96% of Taiwan's 23 million citizens. Totally 28 911 patients with a first-time admission diagnosis of RRD (ICD-9-CM codes 361 to 361.07) and undergoing surgical treatment (scleral buckling (SB), pars plana vitrectomy (PPV), or their combination) were identified. The utilized operation type, 180-day readmission rate for recurrent retinal detachment, length of hospital stay, and admission charge were obtained. Contingency table/chi (2) test and t-test were employed for the statistical analysis. RESULTS: Primary PPV (with or without SB) was a primary procedure in 47.3% of cases in 1997. This rate rose significantly to 61.2% in 2005. A significant decrease in the total 180-day readmission rate occurred from 18.95% in 1997 to 13.81% in 2005. These rates also significantly decreased for each surgical modality (from 16.30 to 11.38% for SB, from 21.29 to 14.69% for PPV, and from 22.99 to 16.55% for PPV+SB). The length of hospital stay decreased for each surgical modality between 1997 and 2005. CONCLUSIONS: There was a significant trend towards more frequently employing primary PPV (with or without SB) for the management of primary RRD. In addition, significant improvements in the primary success rates were shown for each surgical modality group and for total samples between 1997 and 2005.