

# 2<sup>nd</sup> WORLD HEART CONGRESS

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## Effect of the timing of surgery on the prognosis of aortic dissection

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**Aim:** The aim of this study was to investigate whether nighttime surgery contributes to higher in-hospital mortality in patients with acute type A aortic dissection.

**Methods:** All patients with acute type A aortic dissection who underwent surgery at Fuwai Hospital from 2010 to 2015 were included in the present study. Depending on the surgery start and end time, patients were divided in daytime and nighttime groups. Propensity matching analysis was used to compare in-hospital mortality and post-operative complications among these groups.

**Results:** A total of 698 patients with acute type A aortic dissection underwent surgery. Among these, 321 patients underwent nighttime surgery (45.98%), while 377 patients underwent daytime surgery (54.02%). The operation time, cardiopulmonary bypass time, and aortic cross clamp time showed statistical differences between the two groups ( $P < 0.01$ ). There was a significant difference between daytime group and nighttime group in in-hospital mortality (6.42% versus 12.08%,  $P < 0.05$ ). The nighttime group had higher incidence rate of re-intubation, continuous renal replacement therapy compared with daytime group ( $P < 0.05$ ). Furthermore, patients who underwent nighttime surgery showed significantly higher adjusted in-hospital mortality than patients who underwent daytime surgery (odds ratio 2.13, 95% confidence interval 1.19 to 3.81,  $P = 0.01$ ).

**Conclusion:** Patients with acute type A aortic dissection who suffered from some serious medical conditions were more likely to die in the hospital if they underwent emergency nighttime surgery.

### Biography

Jinlin Wu has completed his PhD from Peking Union Medical College, China. He is a young Cardiovascular Researcher, currently doing Residency training in Fuwai Hospital, China.

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