

Editorial



Patients Expect the Same Quality of Round-the-Clock Surgical Care

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Conflict of Interest

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Data Sharing Statement

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▶ See the article “Off-hours Surgery and Mortality in Patients With Type A Aortic Dissection Repair: A Systematic Review and Meta-Analysis” in volume 54 on page 126.

Several studies showed the existence of the “weekend effect” for emergent medical conditions, including myocardial infarction,¹⁾ acute pulmonary embolism,²⁾ type A aortic dissection (TAAD),³⁾ and emergency general operations.⁴⁾ In addition, extracorporeal cardiopulmonary resuscitation after cardiac arrest at weekends resulted in lower long term survival.⁵⁾ Especially, in the expecting significant shortage of staff, the weekend effect could be important issue.⁶⁾

In this issue, Liu et al.⁷⁾ present meta-analysis entitled “Off-hours Surgery and Mortality in Patients With Type A Aortic Dissection Repair: A Systematic Review and Meta-Analysis.” Nine studies with 16,501 patients undergoing TAAD repair surgery were 22 included in the meta-analysis.⁷⁾ Overall, patients who underwent surgery during the 23 weekend had higher in-hospital mortality (pooled odds ratio, 1.41; 95% confidence interval, 1.14–1.75, p=0.002) than those treated on weekdays.

Several explanations for the weekend effect maybe related with some circumstances: weekend on-call teams may have less experience working together, the working-load may be heavier, and the staffing for postoperative care may be lower. The full complement of staff and resources in health care is generally greater on weekdays compared with weekends and during daytime compared with nighttime. The circadian rhythm has previously been established to have an impact on both surgeons and patients.⁸⁾ Other proposed explanations are selection bias, with more severely diseased patients presenting on weekends, and reduced availability of diagnostic and therapeutic procedures.

Does a “weekend effect” really affect the surgical outcomes of type A dissection? Ahlsson et al.⁹⁾ did not find the weekend effect to be relevant. Using the Nordic Consortium for Acute Type A Aortic Dissection Database registry, which included data from eight hospitals and 1,159 patients over a 10-year period from 2005 to 2014, the authors found that 30-day mortality was not affected by the timing of operation.⁹⁾ Wu et al.¹⁰⁾ showed that the weekend effect was not found to be applicable to acute TAAD outcomes, and the weekend effect is disease-specific and may vary across healthcare system. These findings could be related to the high-volume centers.

The contents of the report are the author's own views and do not necessarily reflect the views of the *Korean Circulation Journal*.

Experienced hospitals, if not high-volume centers, usually have stable and adequate medical resources whether it is a holiday or weekend. Patients would expect hospital to provide the same quality of surgical care round the clock.

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