

Dialysis and Timing of Surgery and Anesthesia

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ACS NSQIP Surgical Risk Calculator

Enter Patient and Surgical Information

Diabetes
 No

Hypertension requiring medication
 No

Congestive Heart Failure in 30 days prior to surgery
 No

Dyspnea
 No

Current Smoker within 1 Year
 No

History of Severe COPD
 No

Dialysis
 No

Acute Renal Failure
 No

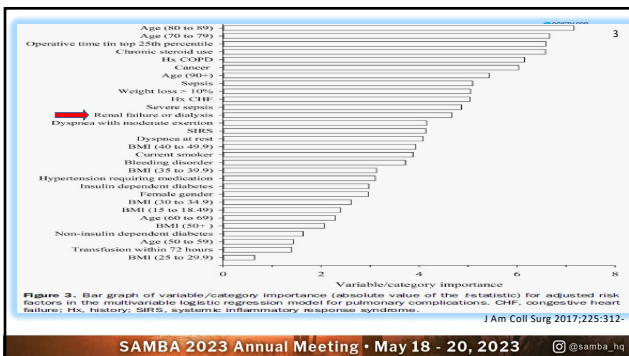
TABLE 1 Revised Cardiac Risk Index⁷

Two or more of the following risk factors make a patient "high risk."

- High-risk surgery (intra-abdominal, intrathoracic, or supra-inguinal vascular procedures)
- History of ischemic heart disease
- History of congestive heart failure
- History of cerebrovascular disease
- Preoperative treatment with insulin
- Preoperative serum creatinine >2.0 mg/dL

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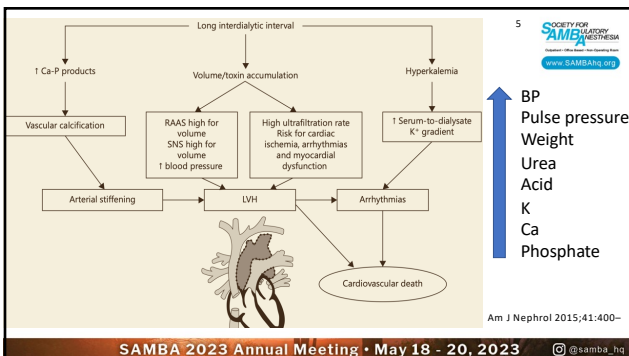
Adverse Effects of Conventional Thrice-Weekly Hemodialysis: Is It Time to Avoid 3-Day Interdialytic Intervals?

- ✓ Maintenance hemodialysis is typically scheduled 3x/week due to simple logistic reasons (availability and cost)
- ✓ Morbid and mortal events occur more frequently during the last day of the long interdialytic interval

Am J Nephrol 2015;41:400-

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Dialysis outcomes and analysis of practice patterns suggests the dialysis schedule affects day-of-week mortality

The risk of death for hemodialysis patients is highest on the days following the longest interval without dialysis (usually Mondays and Tuesdays)

Table 2 | RR of death (all-cause) by sex (United States, Europe, and Japan)

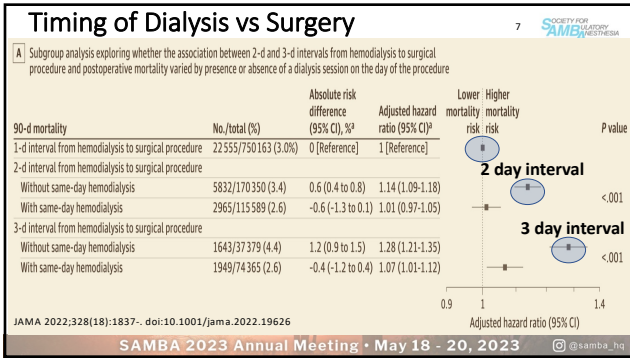
Comparison	Schedule	RR, male	RR, female	P-value (difference)
Monday vs. Avg	MWF	1.32	1.47	0.152
Tuesday vs. Avg	TTS	1.45	1.20	0.028

Abbreviations: Avg, average; MWF, Monday-Wednesday-Friday; RR, relative risk; TTS, Tuesday-Thursday-Saturday.

Kidney International 2012;81:1108-; Kidney Int 1999; 55: 1553-


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
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SUMMARY

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- ✓ Highest risk of death on Monday if on M, W, F schedule
- ✓ Those on T, Th, F schedule have highest risk of death on Tuesday
- ✓ Nondialysis days have lower risks for mortality compared with dialysis days
- ✓ **Patients should be dialyzed the day before procedures and anesthesia**
- ✓ Adjust days to have extra dialysis the day before if needed
 - ✓ M, W, F schedule is done M, W, Th, Sa to allow for Friday surgery
- ✓ Only day surgery cannot occur is Monday
- ✓ NO dialysis available on Sunday

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