


What's New And What's Wrong With The New SVS Guidelines For Aortic Surgery


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Disclosures

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SOCIETY FOR VASCULAR SURGERY® DOCUMENT

The Society for Vascular Surgery practice guidelines on the care of patients with an abdominal aortic aneurysm 

Ellis L. Chahal, MD, PhD; Ronald L. Dalman, MD; Mark K. Edwards, MD; Benjamin M. Jackson, MD; W. Anthony Lee, MD; M. Ashraf Mansour, MD; Tara M. Mastrototoli, MD; Matthew Meli, MD; M. Hassan Murad, MD, MPH; Louis L. Nguyen, MD, MBA, MPH; Gustavo S. Oderich, MD; Madhukar S. Patel, MD, MBA, ScM; Marc S. Schermerhorn, MD, MPH; and Benjamin W. Starnes, MD; Boston, Mass; Palo Alto, Calif; Chicago, Ill; Philadelphia, Pa; Boca Raton, Fla; Grand Rapids, Mich; London, United Kingdom; Rochester, Minn; and Seattle, Wash.

- 5.5 cm threshold males, 5.0 cm females (fusiform anatomy)
- OSR annual volume 10 cases < 5% mortality
- EVAR annual volume 10 case < 2% mortality
- No role for statin to decrease AAA growth rate
- Treat expanding type II and all type I and III endoleaks





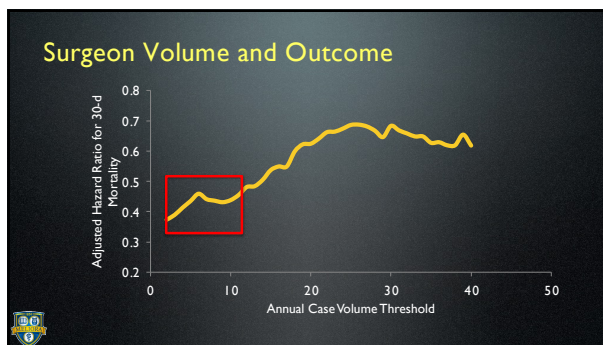
Volume

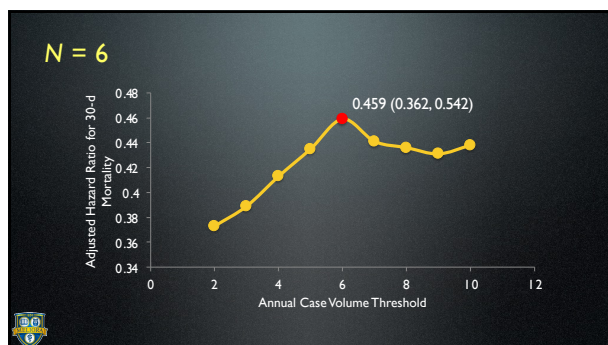
OPEN REPAIR



SPARCS

- All-payor NY state database
- Established 1979
- Started for discharge planning
- Currently collects:
 - Comorbidities, procedure CPT, mortality, complications, charges
 - Inpatient, ambulatory surgery, office procedures, ER

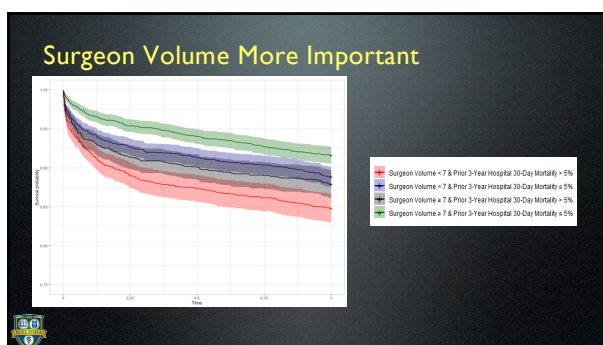
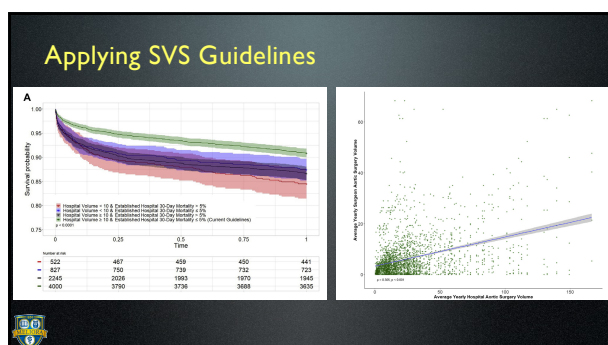






Results — 30-day and 5-year

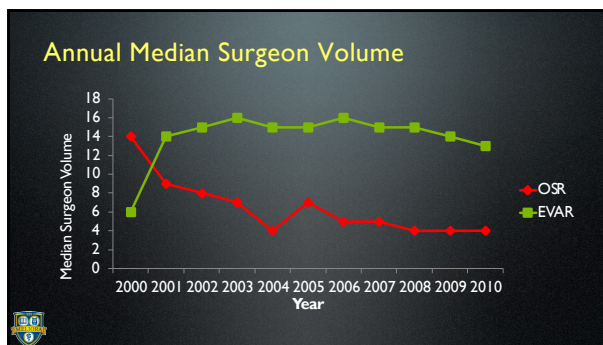
	Volume < 6	Volume ≥ 6	p
N (11,086)	4,429	6,657	
30-d Mortality (%)	7.0±0.4	3.6±0.2	<0.001
LOS (d)	13.6±0.2	9.9±0.2	<0.0001
Readmit (%)	2.3±0.2	1.9±0.2	NS
Cox Adjusted Hazard Ratio for 30-d Mortality		0.459±0.08	<0.0001

	Volume < 6	Volume ≥ 6	p
N (11,086)	4,429	6,657	
5-yr Mortality (%)	29.8±0.7	26.3±0.5	<0.001
Cox Adjusted Hazard Ratio for 5-yr Mortality		0.201±0.06	<0.0001



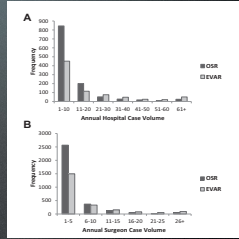
Volume

ENDOVASCULAR REPAIR



EVAR Analysis

- Surgeon volume cutoff = 6
- Hospital volume cutoff = 10
- High volume more likely to be academic sites and higher comorbidities



EVAR Outcome	Matched		P	Hospital volume		P
	High	Low		High	Low	
N	5,387	5,387		4,952	4,952	
3-year value (year/\$100k)	6.1 ± 0.1	4.6 ± 0.1	<0.001	6.0 ± 0.1	4.9 ± 0.1	<0.001
3-year survival (%)	80.5 ± 0.5	80.6 ± 0.5	NS	79.8 ± 0.6	80.9 ± 0.6	NS
30-day value (day/\$100k)	67.7 ± 1.6	52.5 ± 0.8	<0.001	66.9 ± 1.6	54.1 ± 1.3	<0.001
30-day survival (%)	98.1 ± 0.2	98.1 ± 0.2	NS	98.0 ± 0.2	98.3 ± 0.2	NS
Index repair charges (\$10k)	5.4 ± 0.8	6.8 ± 0.9	<0.001	5.6 ± 0.9	6.5 ± 0.9	<0.001
30-day cumulative charges (\$10k)	7.2 ± 0.1	9.0 ± 0.1	<0.001	7.5 ± 0.1	8.7 ± 0.1	<0.001
3-year cumulative charges (\$10k)	8.4 ± 0.2	10.7 ± 0.2	<0.001	8.7 ± 0.2	10.0 ± 0.2	<0.001
30-day readmissions (%)	2.7 ± 0.2	2.7 ± 0.2	NS	2.6 ± 0.2	2.4 ± 0.2	NS
3-year complications (%)	9.3 ± 0.4	8.8 ± 0.4	NS	8.9 ± 0.4	7.3 ± 0.4	0.001

Threshold

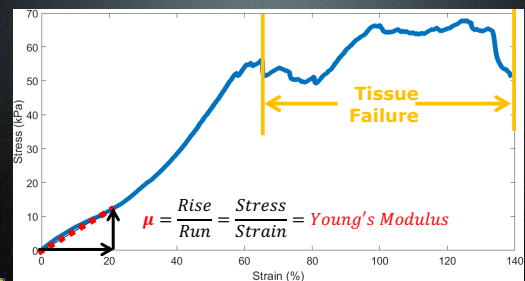
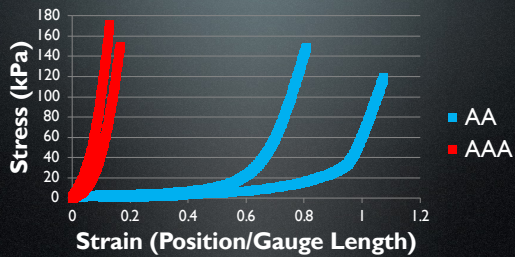
DIAMETER AND INDICATION

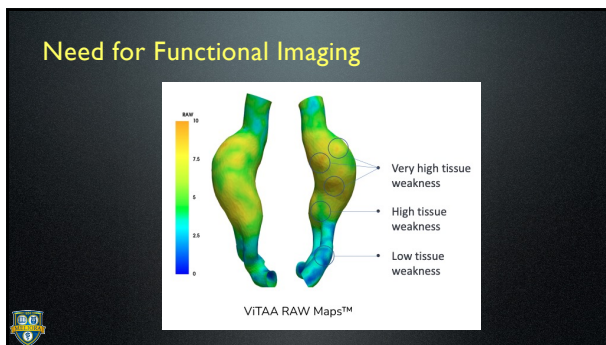
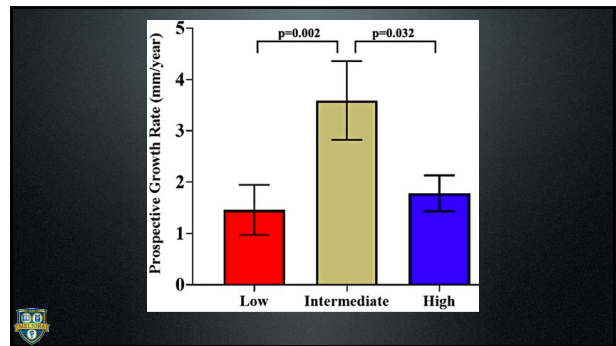
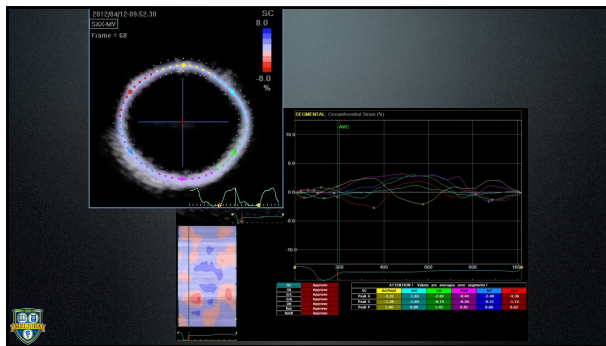
Reconsidering gender relative to risk of rupture in the contemporary management of abdominal aortic aneurysms

Ahlin A, Skibba, MD, James R. Evans, MD, Steven P. Hopkins, MD, H. Richard Yoon, MD, Tony Karim, MD, John H. Kubliedich, PhD, and Daniel S. Rauh, MD, *Journal of Vasc*



Stress versus Strain





Summary

- Surgeon and hospital volumes correlate with OSR but may not for EVAR
 - OSR surgeon volume = 6, center = 10
- Suggests greater role for regionalization of open aortic care
- Need for improved care process and support for low volume critical access sites
- ? Flaws of diameter based operative indication

References 