

AORTIC STENOSIS + TAVR

A CLINICAL UPDATE

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BRIEF OVERVIEW

Aortic Stenosis is a progressive disease



Aortic Stenosis: is a buildup of calcium deposits on the valve, which causes it to narrow and reduce blood flow to the rest of the body.

- The symptoms are commonly misunderstood by patients as 'normal' signs of aging.
- These may be signs that your severe aortic stenosis has reached a life-threatening point.
- Studies have shown that while many patients initially report no symptoms, after closer examination, 32% do have symptoms.¹



About 1 out of every 3 people with aortic stenosis realize they have symptoms only when further evaluated.



Fatigue



Swollen ankles and feet



Shortness of breath



Not engaging in activities you used to enjoy



Chest pain



Feeling dizzy or lightheaded



Difficulty walking short distances



Difficulty sleeping



Rapid heartbeat



Fainting

Severe SAS patients are...



Under-diagnosed

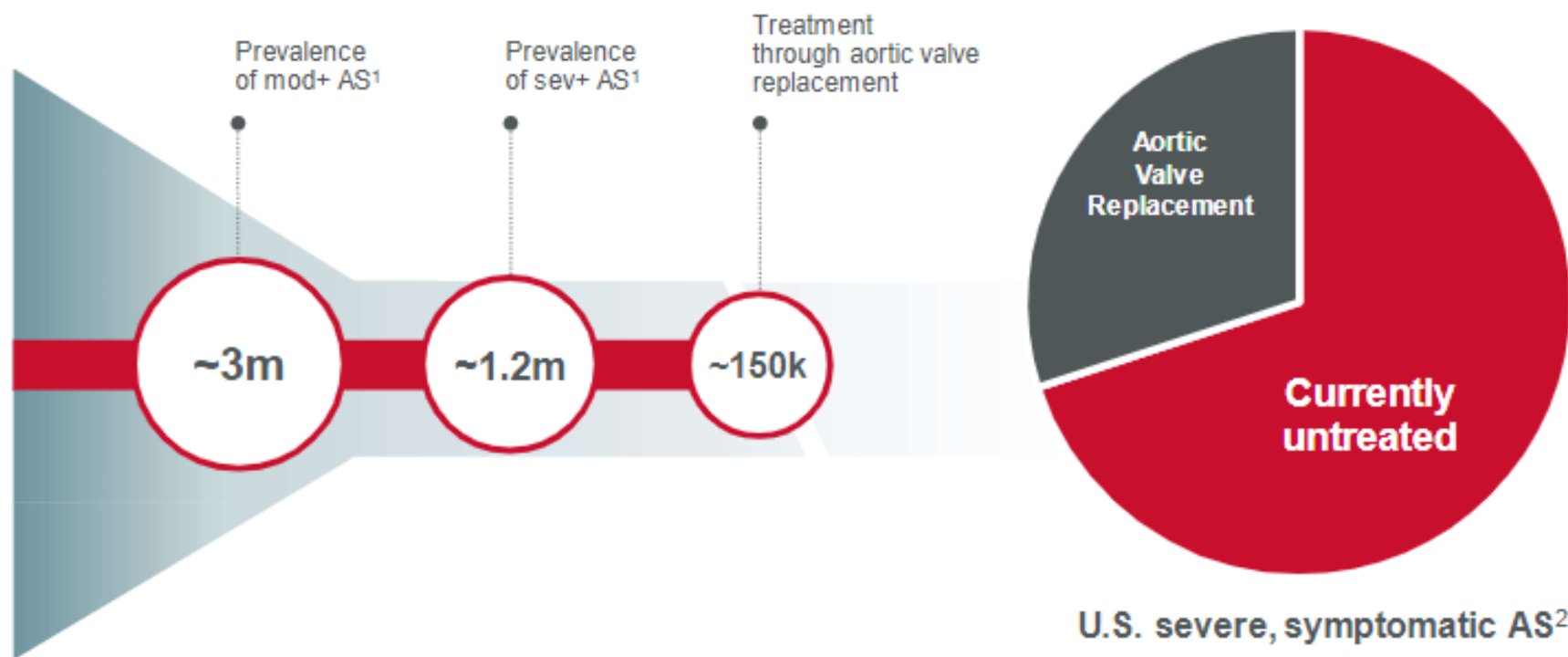


Under-treated



Running out
of time

High number of severe AS patients remain undertreated



WHY?

MANY PATIENTS WITH SEVERE AORTIC STENOSIS UNDERREPORT SYMPTOMS, DELAYING TREATMENT.

2020 ACC/AHA Guideline recognize that patients may deny symptoms as they gradually limit activity.

Why do patients withhold important information?

Often blame symptoms on old age or adapt their lifestyles to manage them



Don't want to be a "difficult" patient because they don't understand



May think it's unrelated and forget to bring up during a visit



Patients trust you to know the signs and when to act.



Treatment is **critical** for survival.

Without proper and timely intervention, your severe aortic stenosis patient may die within 2 years¹

Chance of living without aortic valve replacement (AVR)¹

50%

at 2 years



20%

at 5 years



Probability of death while
waiting for treatment²

11.6% at 6 months post
recommendation
for AVR

THINGS TO REMEMBER

1. Early intervention is still important.
2. You do not have to wait for severe symptoms to refer.



Medicine



Surgical Aortic Valve Replacement (SAVR)



Balloon Aortic Valvuloplasty (BAV)



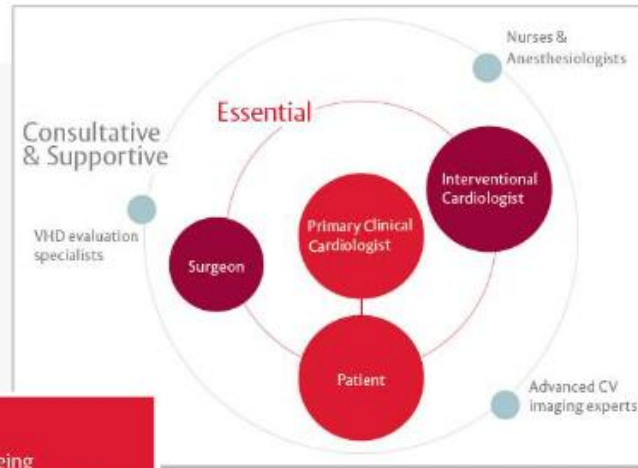
Transcatheter Aortic Valve Replacement (TAVR)

Guidance to a Heart Team allows for the most comprehensive evaluation

Per the 2020 ACC/AHA Guideline for Valvular Heart Disease, engagement between the Heart Team and the primary clinical cardiologist is of critical importance.

Intervention & the Heart Team

Evaluations should be multidisciplinary and multi-institutional with essential roles working together and leveraging consultative and supportive roles when needed.



Your patients know you have their best interest at heart.

An evaluation from a **Heart Team** can give them extra reassurance that you want only the best chance for the best outcome for them.



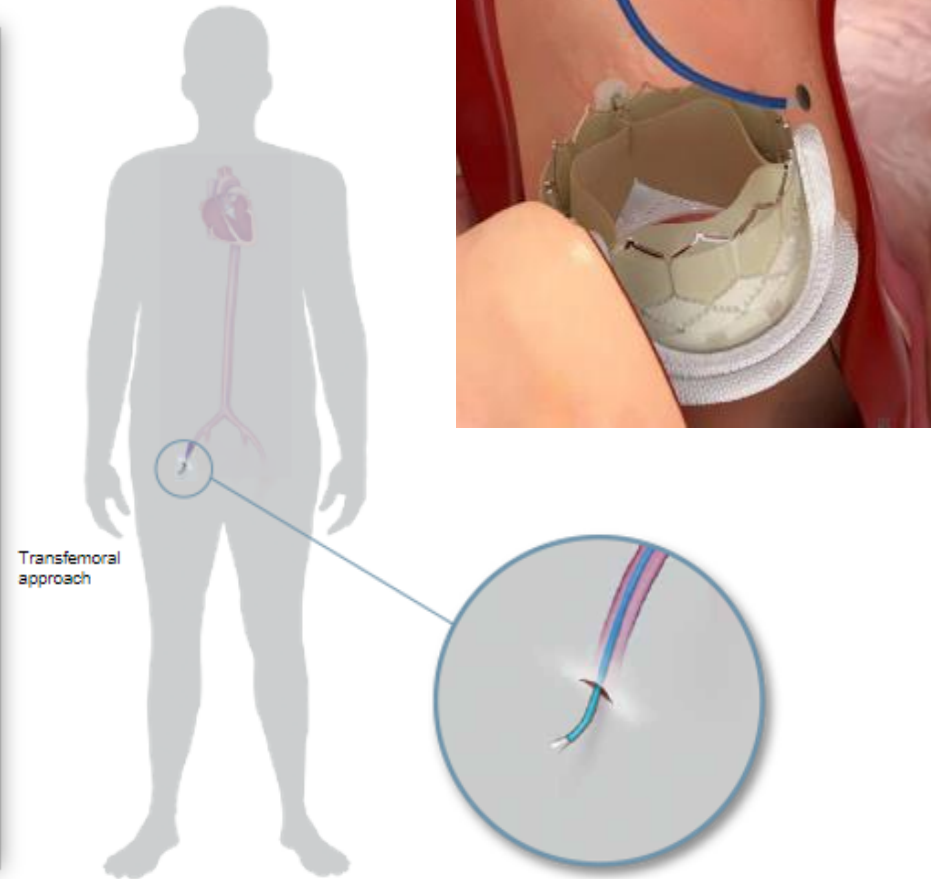
All patients with severe valvular heart disease being considered for valve intervention should be evaluated by a multidisciplinary team..."

2020 ACC/AHA Guidelines, Top 10 Take Home Messages

RSFH Heart Team
(843) 720-8448

TAVR

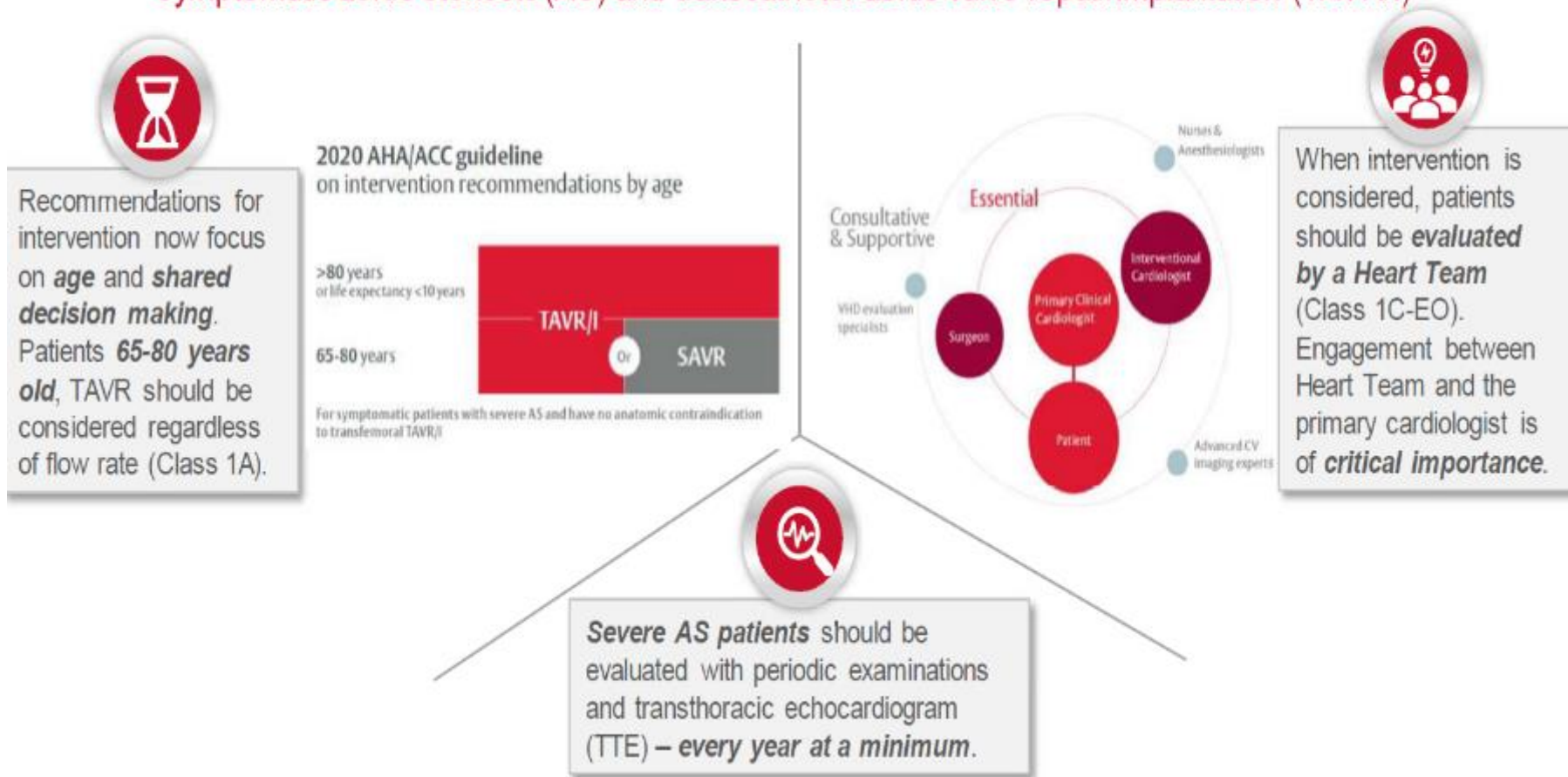
- Less invasive option for severe aortic stenosis
- Catheter-based technique performed while the heart is still beating
- Inserts a new valve within your diseased aortic valve
- Typically associated with shorter hospital stay and recovery time
- On average TAVR procedure lasts about 1 hour
- 1% of patients experience stroke or death at 1 year post TAVR



WHAT'S NEW FOR TAVR?

2020 ACC/AHA guideline update

Key updates from the 2020 ACC/AHA Guideline for Valvular Heart Disease related to severe symptomatic aortic stenosis (AS) and transcatheter aortic valve repair/implantation (TAVR/I)



2020 AHA/ACC guideline recommendations

Today's guidelines reflect the latest low-risk approval, with **recommendations focusing on age and shared-decision** making instead of risks.

2020 AHA/ACC guideline recommendations

2020 AHA/ACC guideline on intervention recommendations by age

>80 years
or life expectancy <10 years

65-80 years



For symptomatic patients with severe AS and have no anatomic contraindication to transfemoral TAVR/I

Indications for TAVR/I are expanding as a result of multiple randomized trials, including the latest PARTNER trials, which are reflected in these recommendations.

Recommendations shift their focus

2014

- Recommendations for choice of intervention were based primarily on level of surgical risk
- Prohibitive, high, intermediate, and low

2020

- Only use risk score to eliminate SAVR as an option for high or prohibitive risk patients
- Utilize age as a key factor
- Emphasizes a shared decision-making process that accounts for the patient's values and preferences



DID YOU KNOW?

Until recently, surgery was considered the best option for valve replacement.

Based on growing evidence and clinical trials, TAVR can be considered for patients who are at low surgical risk.

Today's TAVR has many faces

73 YEAR OLD FEMALE		81 YEAR OLD MALE		88 YEAR OLD FEMALE	
Susan Low Surgical Risk Severe AS, symptoms include decreased exercise tolerance		David Intermediate Surgical Risk Severe AS, symptoms include fatigue, dyspnea upon exertion		Patricia High Surgical Risk Severe AS, symptoms include reduced mobility and inability to walk short distances	
II	NYHA Class	III	NYHA Class	III	NYHA Class
0	Frailty Indicators	Passed 3 out of 4 with exception of grip test	Frailty Indicators	Failed 4/4	Frailty Indicators
2%	Surgical Risk Score	6%	Surgical Risk Score	10%	Surgical Risk Score
None	Comorbidities	Diabetes, High Blood Pressure, Previous PCL. No other comorbidities.	Comorbidities	Oxygen-dependent chronic obstructive pulmonary disease, hypertension, and previous pacemaker implantation due to sick sinus syndrome.	Comorbidities
Retired nurse who enjoys frequent travel, working out and bike rides. She looks forward to an extended life expectancy due to her age and active lifestyle.	QoL Expectations	Semi-retired executive for an insurance company. Enjoys walking trails around his home and playing with his grandkids.	QoL Expectations	Retired teacher and requires assistance in daily life activities.	QoL Expectations
TAVR Patient		TAVR Patient		TAVR Patient	

More patients than ever before have the opportunity to experience superior outcomes.
 2020 ACC/AHA Guidelines recommend focusing on age and shared-decisions instead of risk.

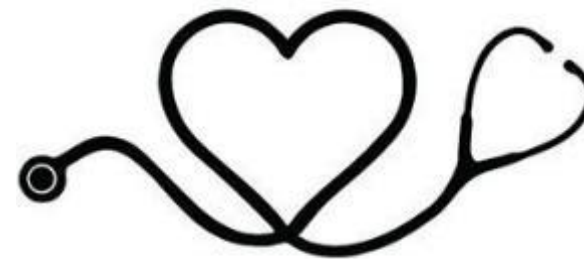
REMEMBER WHEN?

- Patients had prolonged hospitalizations and had to stay in the ICU post TAVR?
- When patients were d/c home on Plavix?
- When we used general anesthesia?



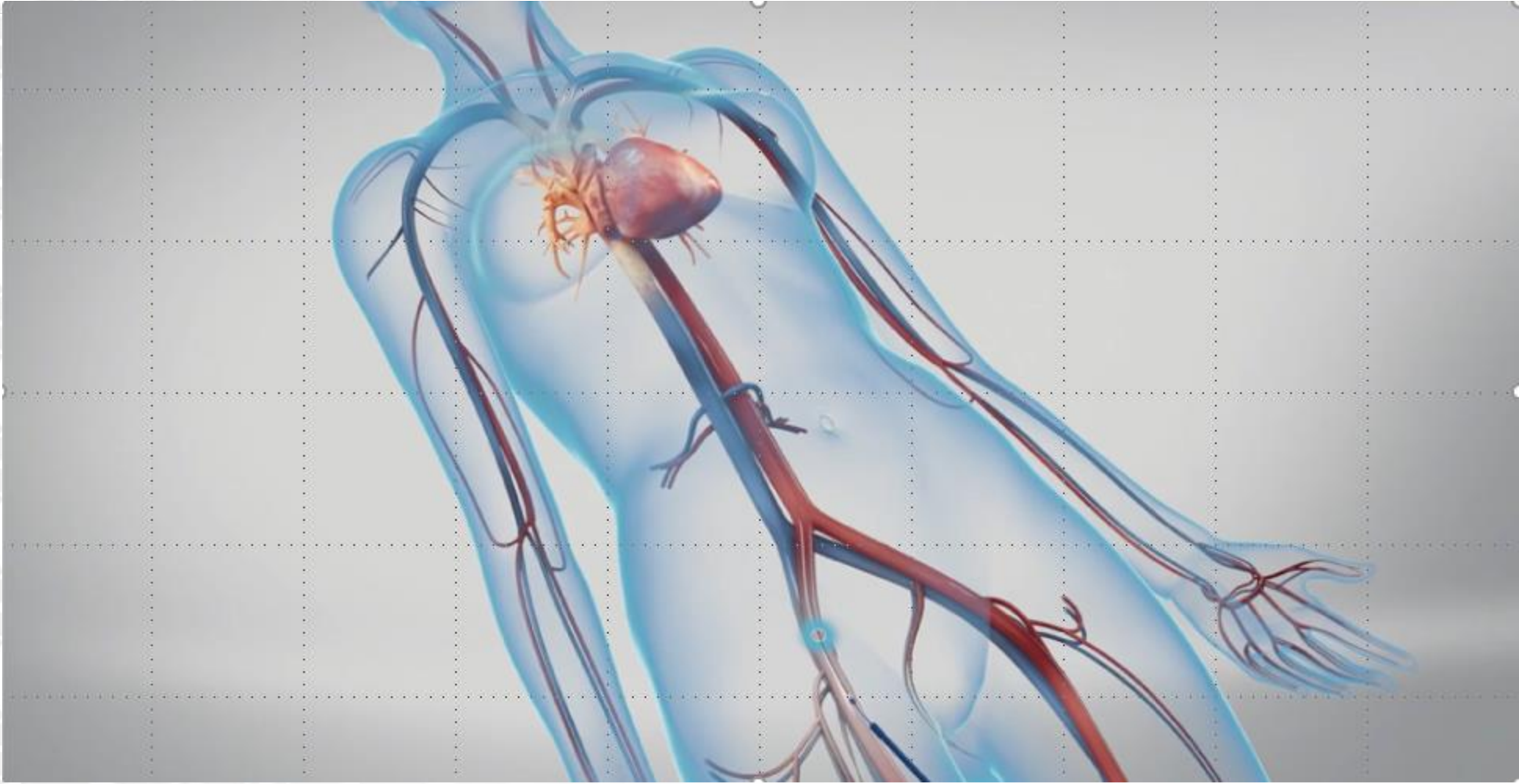
NOW...

- Most patients do not require observation in the ICU post op.
- Most patients are discharged the day after TAVR.
- Patients are d/c home on baby ASA, not DAPT.
- Conscious sedation is now common practice.



3 YEAR TOTALS	ROPER	NATIONAL AVERAGE
BLEEDING COMPLICATOINS	0.8%	1.3%
NEW PACEMAKERS	4.8%	6.6%
VASCULAR COMPLICATIONS	1.2%	2.6%
SIGNIFICANT CARDIAC EVENTS	0%	0.5%
MORTALITY	0.4%	0.9%
DEVICE COMPLICATIONS	0%	1.2%

645 TOTAL TAVRs TO DATE @ ROPER



WHEN IN DOUBT
REFER!

(843) 720-8448