#ASEchoJC Twitter Chat

Tuesday, November 15, 2022 – 8 PM ET

- **Mysterious Infantile Cyanosis: An Imaging Case Series** (CASE, October 2021)
- **Fatal Sinus of Valsalva Aneurysm and Dissection into the Left Ventricle With Extension to the Interventricular Septum: A Challenging Diagnosis** (CASE, December 2021)

**Authors**

- Nilda Espinola Zavaleta, MD (@nilda_zavaleta)
- Sudeep Sunthankar, MD (@SunthankarMD)

**Moderators:**

- Kelly Boegel, ACS, RCCS, RCS, FASE (@boegel_kelly)
- Enrique Garcia-Sayan, MD, FACC, FASE (@EGarciaSayan)
- Ritu Thamman, MD, FASE, FACC (@iamritu)
- Vincent L. Sorrell, MD, FASE (@VLSorrellImages)

**Enrique Garcia-Sayan, MD, FACC, FASE Tweetorial:** 11-14-2022
https://twitter.com/EGarciaSayan/status/1592125119589416963

**Kelly Boegel, ACS, RCCS, RCS, FASE, Clinical Lead Cardiac Sonographer Tweetorial:** 11-14-2022
https://twitter.com/boegel_kelly/status/1592073738098724871

**Introduction and Welcome:** Welcome to tonight’s #ASEchoJC! 2 @CASEfromASE discussions w/ authors @SunthankarMD @nilda_zavaleta, EiC @VLSorrellImages & co-moderators @iamritu @boegel_kelly

[Integrated external content]

1. Bit.ly/3UvHuPX 1-5
2. Bit.ly/3E3esQP 6-10 (English+Spanish)

Use #ASEchoJC in all Tweets
Q1: What is the embryologic origin of cor triatriatum dexter?

A1 Notable Responses:

@EGarciaSayan: ▲ CTD due to complete persistence of the R valve of the sinus venosus, normally reabsorbed during embryogenesis.

▲ More common (partial) variants of this phenomenon include prominent Eustachian valve & Chiari network.

See this JASE review: https://bit.ly/3hBJV5b

@AntonioBarros_: What is the embryologic origin of cor triatriatum dexter?

A: right sinus venosus

@AntonioBarros_: In CTD, a persistent embryonic right sinus venosus valve becomes a septant membrane that separates the VC & coronary sinus from the right atrial appendage and tricuspid valve. Septation can be partial or complete.

@boegel_kelly: Embryologic origin of CTD is the maldevelopment of the right sinus of venosus which forms the Thebesian and Eustachian valves

@iamritu: Abnormal persistence of right valve of sinus venosus results in cor triatriatum dexter a prominent EV can mimic CTD if RA appears septated. But in CTD, partitioning membrane is attached to interatrial septum ▶️ prominent EV no such attachment http://bit.ly/3TFMZdZ
@SunthankarMD: CTD = maldevelopment of the right valve of the sinus venosus, which forms the Thebesian and Eustachian valves. Thus, the membrane typically attaches to the SVC, Eustachian valve, and the inferior/posterior atrial septum near the coronary sinus.

@VLSorrellImages: FYI, Bartolomeo Eustachio (c 1550-1574) was an Italian anatomist who, like many of his generational peers, was unable to publish much of his work which derived from carefully performed human dissections - a controversial practice in the eyes of the church.

@VLSorrellImages: Henry Gray 1918:

@EGarciaSayan:

△ Incomplete variants of CTD have been described as "forme fruste" in

@CASEfromASE report by @ray_stainback et al

△ ff-CTD membrane attached to atrial septum forms a Y sign but does not cause obstruction

△ Can impact transcatheter procedures

🔗https://bit.ly/3WYs74s
Question 2:

What is the clinical presentation of cor triatriatum dexter? Is it different in children and adults?

A2 Notable Responses:

@EGarciaSayan:

▲ CTD has variable clinical presentation depending on degree of RA partitioning, fenestrations & associated lesions, ASD, PFO

▲ Can be asymptomatic or cause R HF & ↑ CVP

▲ May result in cyanosis and severe hypoxemia such as in this case by @SunthankarMD

@iamritu: varies depending on degree of RA partitioning/ septation

If septation mild, the condition asymptomatic/ incidental finding in vast majority

If severe septation Can get right-sided HF elevated CVP due to obstruction of tricuspid valve, RVOT or IVC
Our case. A full-term neonate presented with cyanosis only when sleeping, which was considered due to a prominent eustachian valve, directing blood flow from the IVC to the LA through the PFO resulting in interatrial R-L shunting.


Presentation of CTD is variable for pediatric pts. Pts may go undiagnosed in childhood or present w/ significant hypoxia (assuming ASD present & R→L) as a newborn.

Feature determining the timing and severity of presentation is the degree of systemic venous obstruction.

Since lesion is a congenital malformation, adults have lived their whole lives with membrane present & thus must have been asymptomatic if not diagnosed in infancy.

Our experience shows degree of systemic venous obstruction lessens over time rather than increase.

Case reports of CTD dx in adults describe it incidentally found during 1) echo or cross-sectional imaging for an unrelated reason 2) during a right heart cath when the membrane entangles the catheter or 3) post-mortem autopsy (not cause of death).

“Degree of septation correlates with intracardiac pressures, RHF"

Mild = asymptomatic- incidental finding

Severe = high CVP, RH failure, or obstruction to the IVC or RVOT.
@VLSorrellImages: Depends on presence of perforations in the membrane, size of perforations, right-to-left shunt & associated malformations.

@AntonioBarros_: The major physiologic consequence is elevation of pressure in the accessory chamber that is proximal to the obstruction.
Question 3:

What associated lesions do we need to look for in patients with cor triatriatum dexter?

A3 Notable Responses:

@EGarciaSayan:

△ CTD often associated with other R-sided malformations which must be excluded by #EchoFirst
△ ASD, PFO
△ Ebstein anomaly
△ Tricuspid or pulmonic stenosis or atresia
△ Hypoplastic RV

@iamritu: 50% cases assoc w other cardiac anomalies of such as pulmonary stenosis, tetralogy of Fallot, Ebstein anomaly http://bit.ly/3TETfmf

D/D prominent Eustachian valve, redundant Chiari’s, especially when membrane is thin, mobile, & engaging into tricuspid valve orifice

@boegel_kelly: Check for atrial septal defects with right to left shunting as seen in this CTD case in TEE imaging 🗣️ https://twitter.com/i/status/1592687772456083456
@iamritu: When ASD is present with CTD & there’s increased atrial pressure (ie from AFib) due to inadequate atrial emptying may be right to left shunting across ASD.

@DavidWienerMD: Reverse Lutembacher’s physiology.

@SunthankarMD: As with all forms of congenital heart disease, a thorough complete study should be performed to assess all chambers, valves, and great arteries and veins.

@SunthankarMD: The features to focus on with CTD are size of right sided structures (i.e. tricuspid valve, pulmonary valve, and right ventricle) as well as size of the atrial septal communication. In congenital cardiology we use the mantra “no flow = no grow”.

@SunthankarMD: We describe CTD with pulmonary atresia/intact ventricular septum (Case 4 in article). In this scenario, it could be postulated that the obstructive membrane --> tricuspid stenosis, hypoplastic right ventricle, and pulmonary atresia.

@rajdoc2005: No Flow = No Grow!! ❤️ that mantra!

@VLSorrellImages: Here is a rare CASE associated with HCM in a young lady:

https://ars.els-cdn.com/content/image/1-s2.0-S193004332200262X-gr2_lrg.jpg

https://doi.org/10.1016/j.radcr.2022.03.087

@VLSorrellImages: In my simple mind:
Since CTD represents an embryologic failure of the right heart, associations to other RH pathology may occur (e.g. Ebsteins) ASD / PFO not uncommon & may lead to hypoxemia or paradoxical emboli.
A4 Notable responses

@boegel_kelly: Take time to carefully evaluate the adequacy of fenestrations:
- use all available windows
- use optimized color Doppler
- Reduce color gain
- color scale set 50-70Hz
- look for turbulence in color Doppler
- spectral Doppler gradients
- 3D imaging
- TEE

@iamritu: based on number & size of fenestrations in fibro-muscular membrane
@SunthankarMD

- absence of connection between the two chambers,
- one or few small openings in the intra-atrial membrane
- Or accessory chamber communicates widely by a large single opening

@SunthankarMD: There are three main ways to assess adequacy of fenestrations by echo: 1) Color flow Mapping to identify number and size of fenestrations (green arrow) within the membrane. Also, it is crucial to look for flow that circumvents the membrane (yellow arrow).

@SunthankarMD: Pulse wave Doppler to detect prograde flow across the tricuspid valve

@SunthankarMD: Look for secondary features of systemic venous obstruction which may include

--> TV, RV, PV hypoplasia
---> significant right to left atrial level shunting.

@SunthankarMD: And a bonus 4th!

4) Perform an agitated saline study to look for relative flow across the tricuspid valve versus the atrial septal communication. Here you see significant R-->L atrial shunt in the setting of significant CTD obstruction https://twitter.com/i/status/1592690040706314241

@iamritu: How often do you use #UEA to help characterize fenestrations in CTD?

@boegel_kelly: I'd love to see some images of #UEA to help characterize fenestrations.
**Question 5:**

**A5 Notable responses**

@iamritu:
http://bit.ly/3g507LY remember to look out for CTD before doing any interventions CTD remnant is usually close to an ASD, if present, & may make percutaneous closure of ASDs, tricky. It can be confused with prominent Eustachian Valve (not attached to interatrial septum)

@SunthankarMD: As with most things in medicine, particularly more rare conditions, it really is an individualized approach to determine which patients require surgical intervention with membrane resection.

@SunthankarMD: Over the first 2–3 months of life, right-to-left atrial-level shunt in CTD may decrease. This is likely due to a combination of somatic growth reducing the effective obstruction of the membrane over time and decreasing pulmonary artery pressures.

@SunthankarMD: Observing pts through this transitional period is encouraged if patient is not having persistent O2sat<80% or episodic significant desaturations. Those who may be good candidates for observation have adequate fenestration size and prograde flow across the TV

@SunthankarMD: Nevertheless, clinical findings are 🚫. Treatment should be based on the patient’s clinical appearance, with saturations as the primary outcome measure.

@SunthankarMD: Resection when:
- persistent hypoxia that does not improve with age
- hemodynamically significant right-to-left shunt causing hypoplasia of the right-sided structures and/or cyanotic spells

@SunthankarMD: In one patient, oxygen saturations were 78% during the pre-operative TEE and 99% during the post-operative TEE after this was resected.
@VLSoerellImages: @CASEfromASE has example of percutaneous repair:
Questions 6:

A6 Notable responses

@nilda_zavaleta: An analysis of a published case series by Chu et al. found that the incidence of SOVA rupture is approximately five times higher in East Asian patients than in westerners. The right coronary sinus is most frequently affected, followed by the non-coronary sinus.

@nilda_zavaleta: Rupture of the aneurysm most often occurs into the RV, followed by the right atrium and rarely into the left ventricle, pulmonary artery, or interventricular septum.

@nilda_zavaleta: Rupture of the right and non-coronary sinuses typically results in communication between the aorta and the RVOT or the aorta and the RA. Left SOVA rupture is clinically less significant, with resultant communication between the LA and LVOT.

@nilda_zavaleta: The case presented is a right SOVA complicated with septal and anterior wall dissection.

@rajdoc2005: Agree. Just wondering why the incidence of rupture is much higher on the right sided sinus than the left sinus..??

@iamritu: Maybe because of the anatomy of the sinuses of Valsalva? This congenital SOVA caused by weakness at juncture of aortic media & the annulus fibrosus is it weakest near the right coronary sinus (65%–85%).

@rajdoc2005: Sounds logical. This is very helpful information! 🙌🙌

@iamritu: Most common cardiac defect with SVA is VSD supracristal/infundibular, when an SVA is in close proximity to a VSD, an unruptured SVA may be misdiagnosed as an SVA with rupture, as opposed to an intact SVA with a coexisting VSD lacks muscular conal septal support in RVOT.

Contiguous sinuses of the aortic and pulmonary valve (white arrow head) are due to the absence of the infundibulum.
Una serie de casos publicados por Chu et al. encontró que la incidencia de ruptura de SOVA es aproximadamente cinco veces mayor en pacientes de Asia del Este que en Occidente. El seno coronario derecho es el más frecuentemente afectado, seguido por el seno no coronario.

La ruptura del aneurisma ocurre con mayor frecuencia en el VD, seguido de la AD y rara vez en el VI, la AP o el tabique interventricular.

La ruptura de los senos derecho y no coronario generalmente resulta en la comunicación entre la aorta y el TSV a la aorta y la AD. La ruptura de ASDV izquierdo es clínicamente menos significativa, con comunicación entre la AI y el TSVI.

El caso presentado es un aneurisma del seno de Valsalva derecho complicado con disección septal y de la pared anterior.

En serie de Mayo Clinic: aneurismas del SV derecho 70% (usualmente fistula al VD), no-coronario 25% (usualmente fistula a AD), izquierdo es poco común (5%~)

Edad media 45, 63% masculino

@EGarciaSayan:

△ SOVA can rupture into heart chambers (usually R), cause compression (RV inflow or outflow, coronaries) or affect conduction system

△ R or L HF Sx depending on chamber affected

△ Rarely rupture into LV, LA, PA, SVC or pericardium, but extracardiac rupture is very rare

A7 Notable responses

@EGarciaSayan:

▲ Most common associated abnormality are VSD (12-53%), RSOVA or NCSOVA can prolapse through a membranous VSD

▲ Also common association with AR (44% in Mayo Series)

▲ Other associations: PSs, ASD, BAV, tet of Fallot, PDA, coarctation, subaortic membrane.

@nilda_zavaleta:

VSD is the most common coexisting cardiac anomaly with SOVA rupture and occurs in 9%-78% of reported patients (30-60%)

@nilda_zavaleta: It is also important to rule out bicuspid aortic valve (15-20%), aortic regurgitation (44-50%), ASD, RVOT obstruction, tricuspid regurgitation, and conduction system involvement

@iamritu: These SOVA are associated w other congenital anomalies, most often VSD (30–60%), bicuspid aortic valve (15–20%), & aortic regurgitation (44–50%)

Here’s anterior bicuspid aortic valve fusion RCC & NCC w SOVA rupture https://bit.ly/325wxKz
@VLSorrellImages: Here’s my $0.02 regarding BAV & SOVA: A True BAV (with only 2 SOV) will excerpt higher stress per sinus than if there are TAV & 3 SOV (increased aneurysm risk).

@VLSorrellImages: Systemic:
Etiology: infection, degenerative diseases, connective tissue disorders, trauma
Autoimmune diseases associated with SOVA
Anatomic:
VSD (>30%) & AR (~50%)
(CoA 4% [be sure to check BP in all extremities] and BAV [15%] rarely)

@EGarciaSayan:

▲ Asociación más frecuente es defecto septal ventricular (12-53%), aneurismas de SV derecho o no-coronario pueden prolapsar a través de DSV
▲ Insuficiencia aórtica (~44%)
▲ Estenosis pulmonar, ASD, BAV, Fallot, PDA, coartación, membrana subaórtica.

@nilda_zavaleta: La CIV es la anomalía cardiaca coexistente más común con la ruptura del ADSV y ocurre en el 9% al 78% de los pacientes reportados (30-60

@nilda_zavaleta: Además, es importante descartar válvula aórtica bicúspide (15-20%), regurgitación aórtica (44-50%), CIA, obstrucción del TSVD, regurgitación tricúspide y compromiso del sistema de conducción

@EGarciaSayan:

▲ Large single-center (Mayo) series:
▲ RSOVA 70% (most common fistula to RV), NCSoVA 25% (most common fistula to RA), LCSoVA less common (5%-)
▲ Median age 45, 63% male

67%-85% of reported SVAs involve the right coronary sinus with most aneurysms rupturing into the right chambers, rarely in the left. Frequently associated with other CHD lesions:

- VSDs
- Bicuspid AoV
- Aortic regurgitation

In patients with existing VSD and a ruptured SVA it can be difficult to distinguish the flows as the SVA shunts overlaps the VSD flow. Take time to properly optimize image and carefully sweep through region to differentiate the two.
A8 Notable responses

@EGarciaSayan:
- Discriminating isolated SOVA rupture from SOVA+VSD is challenging
- Nonruptured SVA near VSD may be misdiagnosed as a ruptured SoVA.
- SAX view: differentiate thin-walled & fibrous SOVA or prolapsed cusp from thicker myocardium
- TEE & multi-modality if in doubt

@nilda_zavaleta: In the presence of a coexisting VSD, the large ruptured SOVA shunt overlaps the VSD flow, which can be difficult to recognize on 2D echo, but 3D echo identifies the two abnormal flows

@nilda_zavaleta: Gerbode defect is a communication from the LV to RA and has shunt from left to right, and it can be divided into congenital or acquired

@iamritu: Gerbode Left ventricular to right atrial communications are rare types of ventricular septal defect & present as direct or an indirect types.

LV-RA shunt in systole as left ventricular systolic pressure is greater than right atrial pressure
@iamritu: In an isolated uncomplicated VSD, Doppler shows a high-velocity systolic & a low-velocity diastolic flow
ruptured SOVA will have a left to right shunt with a continuous high velocity jet (greater than 3.5 m/sec) with lower velocity in systole

@rajdoc2005: Great point here. Color flow Doppler can be confusing with all the aliasing from the high flow. CW Doppler shows the directionality of the flow and the timing better!

@rao_sruti: So beautifully explained Dr. Ritu! I always had a hard time differentiating the two with aliasing jets that usually occur. Thank you so much for conveying it across so succinctly! 🙏

@CardiacZhao: Why is the systolic velocity in SOVA lower? Is it because during systole, the pressure gradient between the sinus and RVOT is lower than that during diastole?

@CardiacZhao: My guess is that during systole, the pressure within the Val sinus is lower than that during diastole? Because I think the higher velocity during systole in VSD is probably due to higher LV systolic pressure than diastolic one.

@iamritu: During systole, RSOVA shunt tracks thru RV wall which gets compressed & flow improves in diastole, causing diastolic augmentation

@evolutsapien: Very helpful...physiology always makes pathology understanding more meaningful.

@EGarciaSayan:
△ Diferenciar ASV de ASV + DSV es dificil
△ ASV sin ruptura cerca a DSV puede ser confundido con ruptura de ASV
△ En eje corto, diferenciar la pared delgada y fibrosa de ASV del miocardio mas grueso
△ ETE o multi-modalidad si persisten dudas
En presencia de una CIV coexistente, el ADSV roto se superpone al flujo de VSD, que puede ser difícil de reconocer en la ecocardiografía 2D, pero la ecocardiografía 3D identifica los dos flujos anormales en la mayoría de los casos.

El defecto de Gerbode es una comunicación del VI a la AD, tiene cortocircuito de izquierda a derecha y podría clasificarse como congénito o adquirido.
Question 9:

@EGarciaSayan: Imaging in SOVA

- Sensitivity >90%
- Location, size, relationship / compression of adjacent structures (RV, RVOT, coronaries), abnormal flow into chambers
- Evaluate for AR & associated lesions
- TEE can help visualize the aorta & ostial coronaries

@EGarciaSayan: CVimaging in SOVA

- #YesCCT & #WhyCMR can be very helpful
- Delineate anatomy & relationship with adjacent structures
- Assist with surgical planning

See fantastic SOTA imaging review for SOVA published in @JournalASEcho: https://bit.ly/3URe8eD

@nilda_zavaleta: In the case of a ruptured SOVA, echocardiographic evaluation with color Doppler reveals continuous flow in systole and diastole, flutter of the tricuspid valve as the color jet moves from the aorta to the right chambers of the heart

@nilda_zavaleta: It is important to define the location of the involved sinus and sinotubular portion of the aorta, the coexistence of bicuspid aorta, the involvement of the conduction system

@nilda_zavaleta: The presence and type of shunts, the severity and mechanism of aortic regurgitation, and the vicinity of coronary ostia.
Both ruptured and non-ruptured SOVAs can be complicated by aortic regurgitation, occurring in 30-50% of patients. CMR used with multiplanar sequencing has allowed for the evaluation of intracardiac shunts in ruptured SOVAs.

New cardiac computed tomography modalities allow for accurate diagnosis of even small SOVA’s in a dynamic setting. According to the 2010 American Heart Association Guidelines on Thoracic Aortic Disease, surgical repair should be considered in:

- Those with aneurysms >5.5 cm, >5 cm in those with bicuspid valves, >4.5 cm in the setting of connective tissue disease, or a growth rate of >0.5 cm/year
- Surgical intervention is recommended for a ruptured SOVA and/or a SOVA with associated intracardiac abnormalities such as VSD or significant aortic regurgitation. Unruptured but symptomatic or enlarging SOVA should also be considered for surgical repair.

What is the origin of SVA? (NC/R/L CC)

Are any adjacent cardiac chambers compressed by SVA?

https://twitter.com/i/status/1592697616940535808

@Ahmed43101178: SV Aneurysm #echofirst diagnosis and management

Nice summary by @EGarciaSayan

@EGarciaSayan: Diámetro de SV en Eco se obtiene en el eje largo paraesternal perpendicular al eje aórtico de borde principal a borde principal (# CT/CMR)

- Considerar edad, superficie corporal, género, y estandarizar

- 3 métodos en la nueva #EchoGuideApp https://asecho.org/echoguide/
@EGarciaSayan:

▲ Sensibilidad de ETT en ASV >90%

▲ Identificar ubicación, tamaño, relación y compresión de estructuras adyacentes, flujo anormal con Doppler color

▲ Descartar insuficiencia aórtica & lesiones asociadas

▲ ETE para visualizar aorta y coronarias

#ASEchoJC

@EGarciaSayan:
△ Imágenes adicionales en ASV incluye uso de #YesCCT & #WhyCMR
△ Delinear anatomía y relación con estructuras adyacentes
△ Asistir con plan operativo
△ Ver excelente review de imagen multimodal en ASV en @JournalASEcho: https://t.co/mSMRKySl5Y

@nilda_zavaleta: En el caso de la ruptura del ADSV, la evaluación ecocardiográfica con Doppler color revela un flujo continuo en sistole y diástole, aleteo de la válvula tricúspide a medida que el chorro de color se mueve desde la aorta a las cavidades derechas del corazón.

@nilda_zavaleta: Es importante definir la localización del seno comprometido y de la porción sinotubular de la aorta, la coexistencia de aorta bicúspide, el compromiso del sistema de conducción,

@nilda_zavaleta: la presencia y tipo de cortocircuitos, la severidad y mecanismo de insuficiencia aórtica y la cercanía de los ostia coronarios.

@nilda_zavaleta: Tanto los ADSV rotos como los no rotos pueden complicarse por insuficiencia aórtica, que ocurre en 30-50% de los pacientes. La resonancia cardiaca con secuenciación multiplanar ha permitido la evaluación de cortocircuitos intracardíacos en ADSV rotos.

@nilda_zavaleta: Nuevos generadores de imágenes de TC cardiaca permiten obtener imágenes diagnósticas precisas incluso de ADSV pequeños en un entorno dinámico. De acuerdo con las guías de enfermedades de la aorta torácica de la AHA 2010, la reparación quirúrgica debe considerarse en

@nilda_zavaleta: aquellos con aneurismas >5.5 cm, >5 cm en aquellos con válvula bicúspide, >4,5 cm en el contexto de enfermedad del tejido conectivo, o una tasa de crecimiento de >0.5 cm/año

@nilda_zavaleta: Se recomienda la intervención quirúrgica para un ADSV roto y/o un ADSV con anomalías intracardíacas asociadas, como CIV o insuficiencia aórtica. También se debe considerar la reparación quirúrgica en un ADSV no roto, pero sintomático o dilatado.
Question 10:

What does the surgeon want to know from the #EchoFirst images about the SOVA?

A10 Notable responses

@EGarciaSayan: surgical indications in SOVA

- Ruptured: early intervention (1-year)
- Symptomatic, non-ruptured: Malignant arrhythmias, endocarditis, coronary or RVOT obstruction
- Asymptomatic: Rapid expansion or worsening AR?
- Percutaneous closure emerging in selected cases

@nilda_zavaleta: The surgeon wants to know the diameter of the SOVA, the competence and severity of pathological changes of the aortic valve, the proper position of the SOVA rupture and coronary ostia

@nilda_zavaleta: The presence and type of the associated structural abnormalities, myocardial involvement (myocardial characterization and quantification of left ventricular mechanics) and associated RV involvement

@iamritu: Surgical approach based on ruptured chamber, assoc lesions

Percutaneous closure an alternative w isolated RSVA but Sx for those w multiple cardiac lesions

closure depends on aneurysm size, relationship of aneurysm w adjacent structures, shape

http://bit.ly/3X0npTT

@VLSorrellImages: Surgeons like seeing pre-op images like this:
https://twitter.com/i/status/1592697896591163392
@boegel_kelly: Keep these things in mind when you are scanning a patient with SOVA

@EGarciaSayan: indicaciones de cirugía en ASV

- Ruptura: Intervención temprana (📸)
- Sintomas sin ruptura: Arritmias malignas, endocarditis, obstrucción coronaria o del tracto VD
- Asintomático: ¿Expansión rápida insuficiencia Ao?
- Considerar cierre percutáneo en casos selectos

@nilda_zavaleta: El cirujano quiere saber el diámetro del ADSV, la funcionalidad y gravedad, de los cambios patológicos de la válvula aórtica, localización precisa del ADSV roto y los ostia coronarios

@nilda_zavaleta: La presencia y el tipo de anomalías estructurales asociadas, el compromiso del miocardio (caracterización miocárdica y cuantificación de la mecánica ventricular izquierda) y el compromiso del VD

@EGarciaSayan: And that's all for tonight's #ASEchoJC, which we are dedicating to the memory of our dear colleague and friend, Greg Tatum 🙏

If you missed live tweets, catch up on the discussion later by searching #ASEchoJC.


🔗 See you again in a few weeks https://twitter.com/i/status/1592699079016210432
Thank you.