NBME Vignettes: **Pearls, Pitfalls** and **Lessons Learned**

Data abnormal, normal > Physical Exam abnormal, normal > Verbiage Demographic, Tomfoolery

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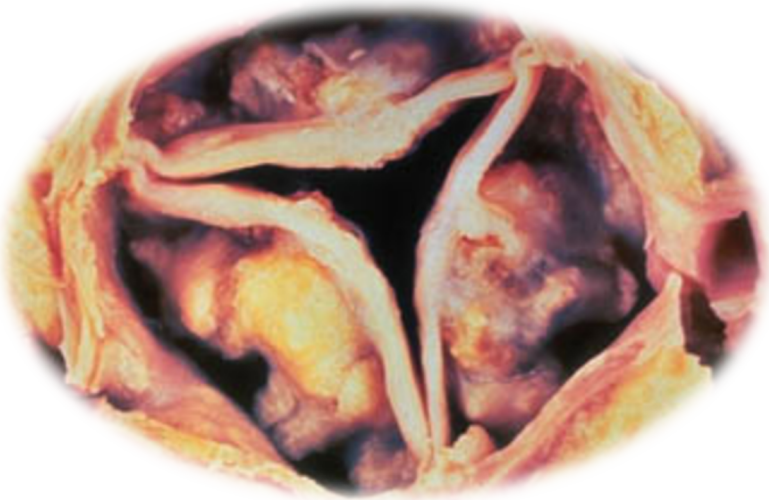
NBME Vignettes: **Pearls, Pitfalls** and **Lessons Learned**

Sample problems: ***Application of Principles***

74 y.o. patient presents to the hospital with fever and progressive dyspnea. PE: 38.3; 86/54; 124 reg. Lungs bibasilar crackles; Heart 3/6 systolic murmur at RUSB. Data: SARS-CoV-2 RT-PCR is detected. The patient dies during the hospitalization and his aortic valve is shown at autopsy. Choose the finding that is most consistent with the clinical presentation and gross pathology specimen.

1. Acute infectious endocarditis
2. Calcification of a congenital bicuspid valve
3. Myxomatous degeneration
4. Serotonin valvulopathy
5. Age-related dystrophic calcification
6. Postinflammatory scarring



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Aortic Stenosis

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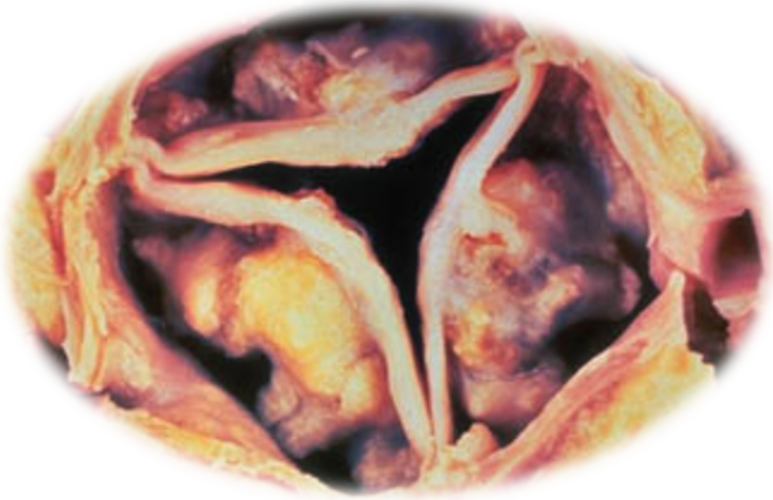

Step One: **Make the Diagnosis**

Data > **PE** > Verbiage

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~~*Aortic Stenosis*~~

Oh wait a minute…
He has a fever and heart murmur…
this must be endocarditis

1. **Acute infectious endocarditis**
2. Calcification of a congenital bicuspid valve
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Question Stem:

Generate a Diagnosis

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Question Options:

Crush Students

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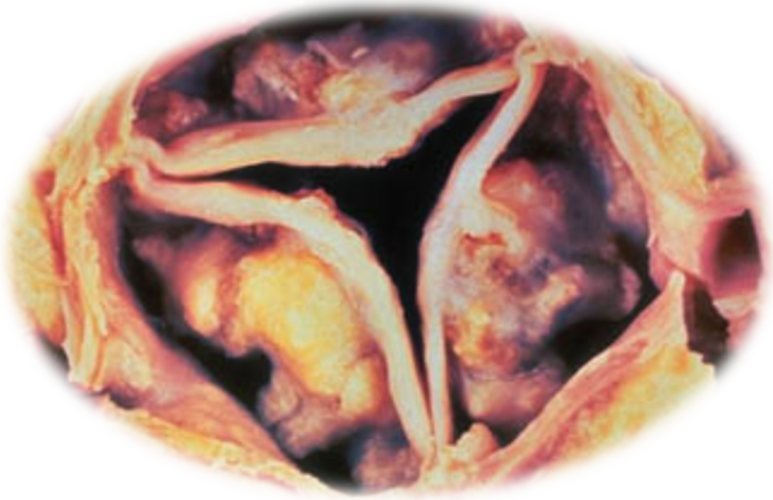

- ***What are the typical associations?***
- ***What are thse key soundbites recorded in your notes?***

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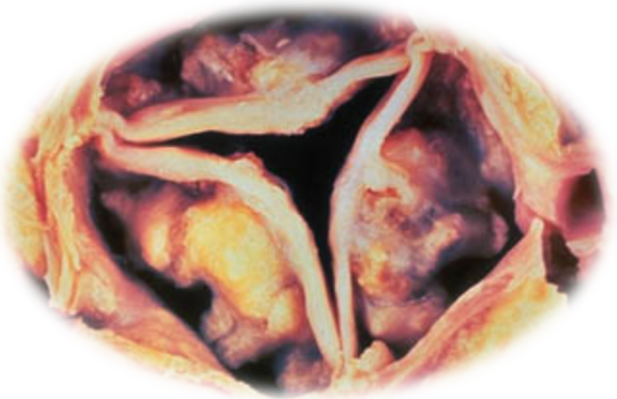

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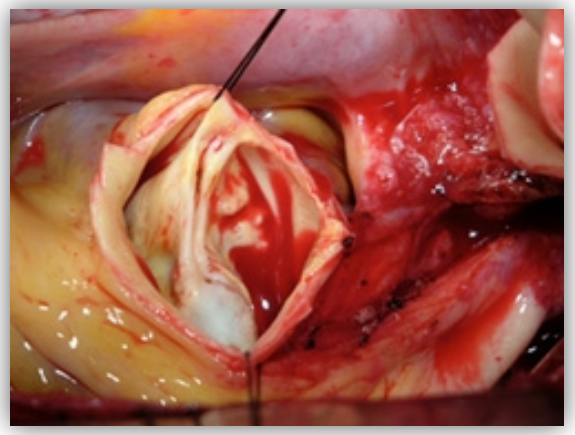

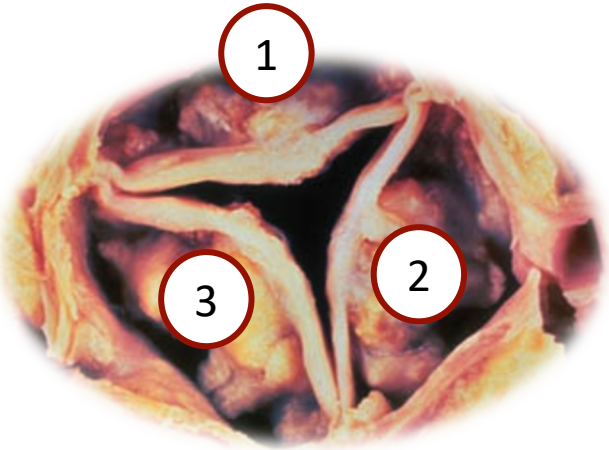

Midline raphe
(*failure of commissural separation*)

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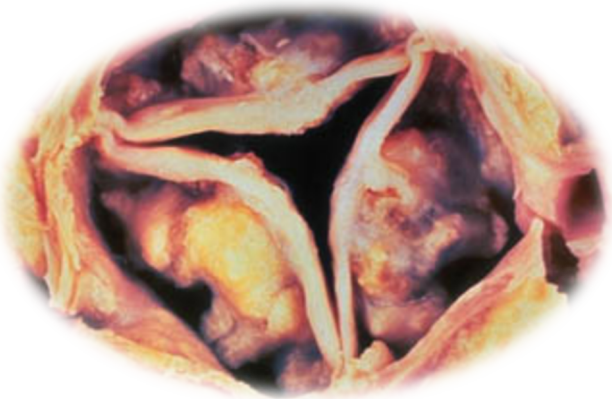

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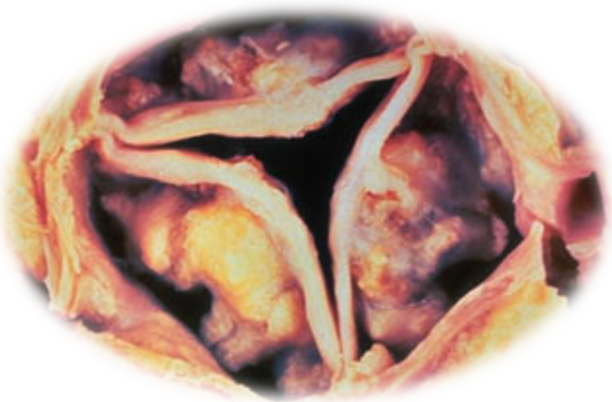

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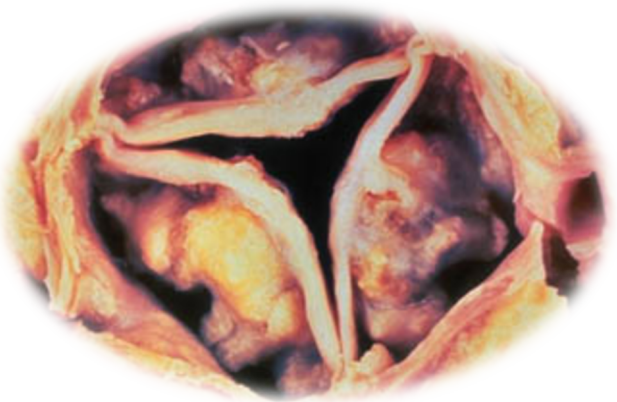
   Why isn't it the answer? How did Sachs describe that?



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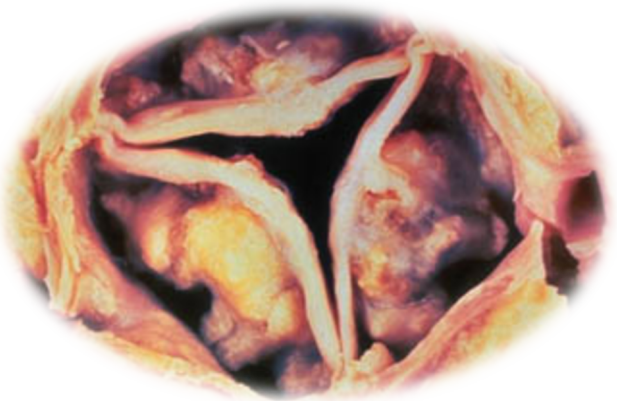
If you can't remember, feel free to check your notes.
Really...it will help the material stick for the next RHD question.



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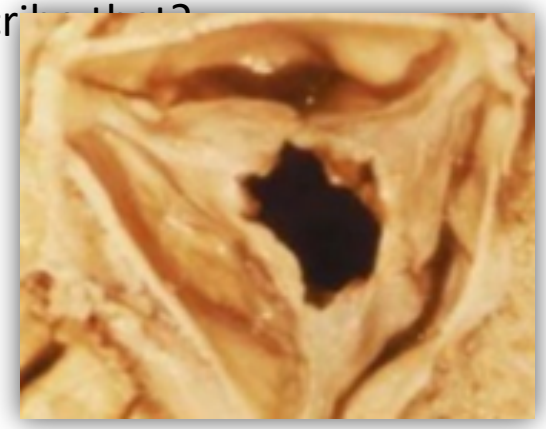
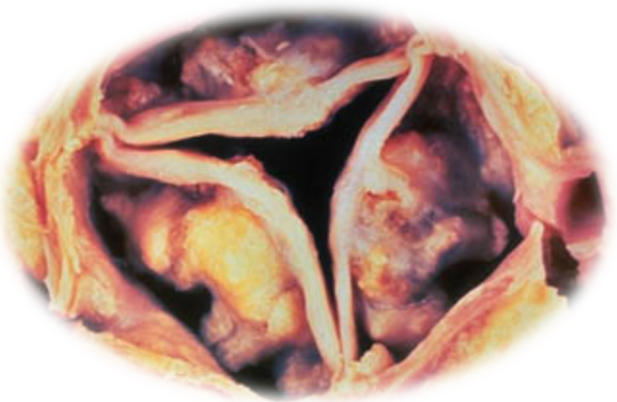
Fusion of the commissures
Fibrous thickening and shortening of chordae





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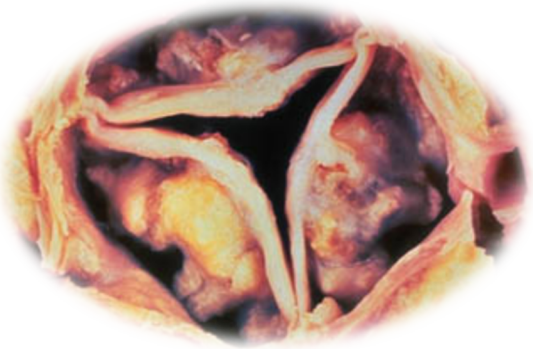

Reconcile Before Submit

Aortic Stenosis

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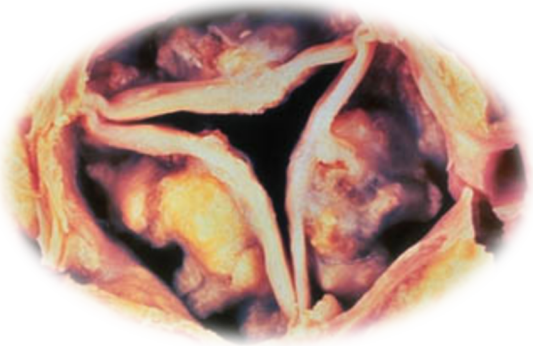

Reconcile Before Submit

What they told you…

- Classic **murmur**
- **Pathology**: stenotic valve with 3 cusps, minimal thickening and normal commissures

What they didn't…

- Splinter hemorrhages, risk factor
- Premature AS/Turner's stigmata
- Prior acute rheumatic fever

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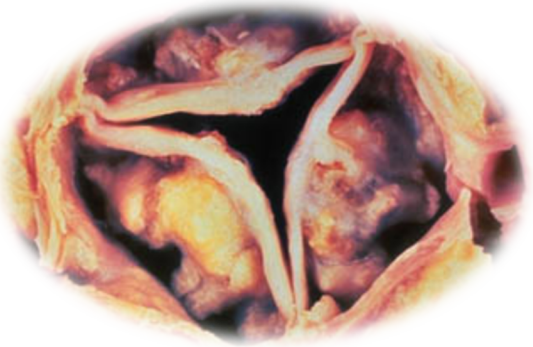

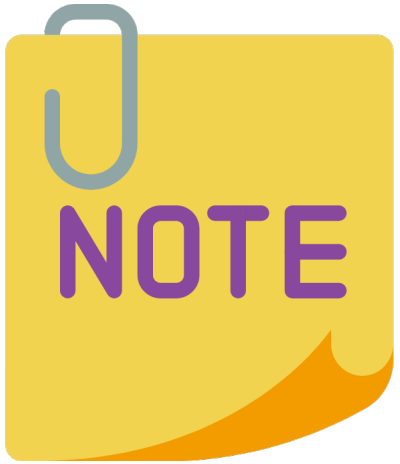

Refine your notes focusing on language (descriptors):

- PE: murmur
- Pathology: age-related dystrophic calcification; (*other*: rheumatic heart disease)

Cement and Reinforce Learning
Reference for future questions

This wasn't a pathophysiology question…I wouldn't necessarily go there…it will resurface

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Sample problems: ***Application of Principles***

A previously healthy 19 y.o. African American presents to ER complaining of shortness of breath. 98/64; HR 112 reg; RR 18; Lungs: bibasilar crackles; Heart: early diastolic sound heard at the apex. Echocardiogram: dilated ventricles, EF is 25%. A cardiac biopsy is performed revealing a lymphocytic infiltrate within the myocardial interstitium. Which of the following is the most likely diagnosis?

1. Coxsackie virus infection
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3. Kawasaki disease
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All sentences are not created equally

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Pathology is King of the Data

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- All options are associated with cardiac disease...
- Run the list quickly to see if anything jumps out in favor of the diagnosis or can be easily excluded...

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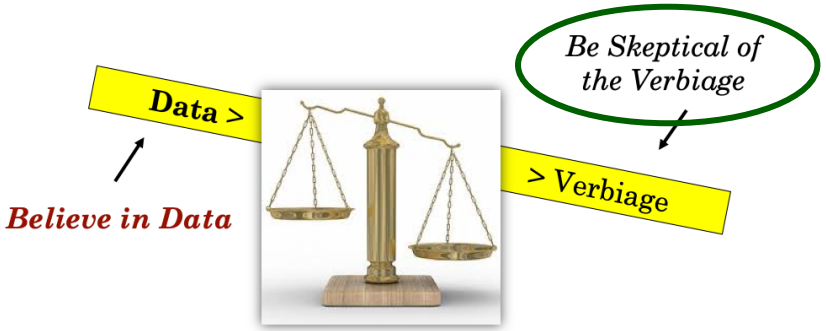

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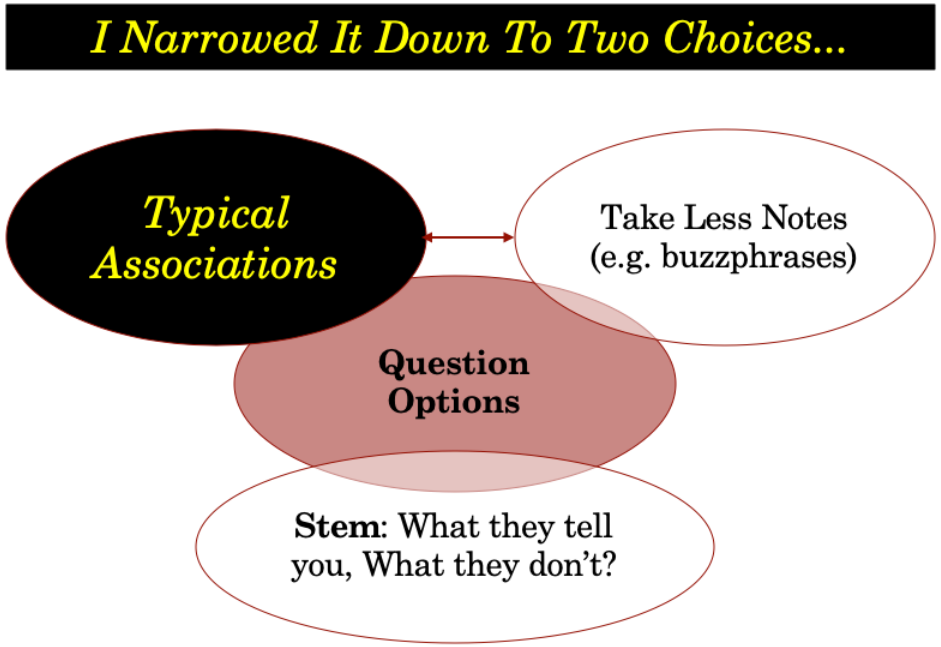

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Data abnormal, normal > **Physical Exam** **abnormal, normal** > Verbiage Demographic, Tomfoolery

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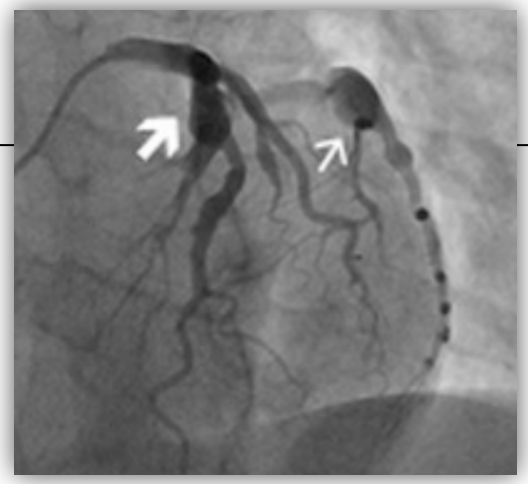
Medium-sized vessel vasculitis



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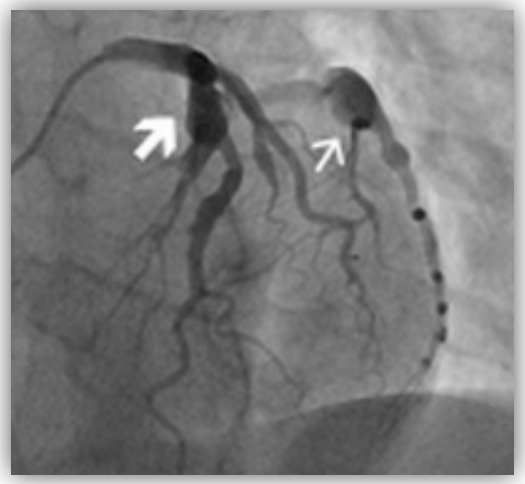
Don't Do This!
Derivative of Derivative



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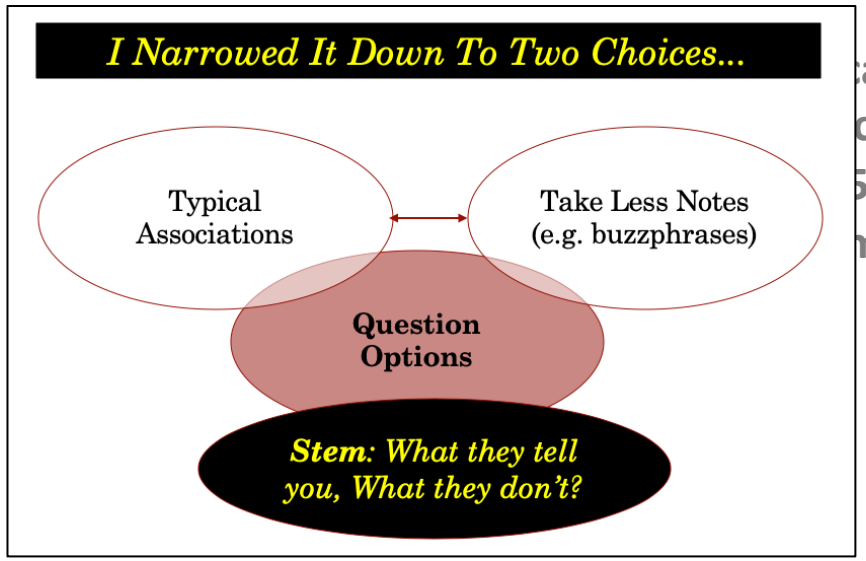

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6. Sarcoidosis

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Oh wait a minute…
African-American with SOB and interstitial crackles…must be sarcoid

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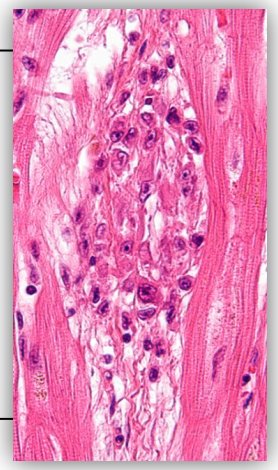

1. **Coxsackie virus infection**
2. **Acute rheumatic fever**: immune manifestation of Strep infection; **Pathology**: Aschoff bodies
3. Kawasaki disease
4. Hypertrophic cardiomyopathy
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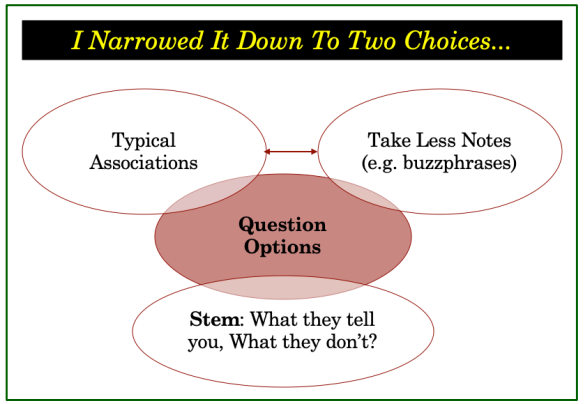
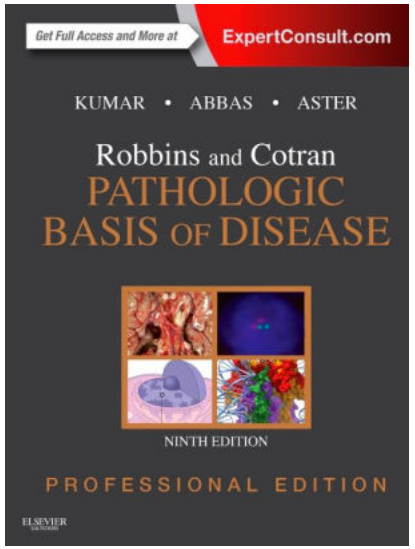


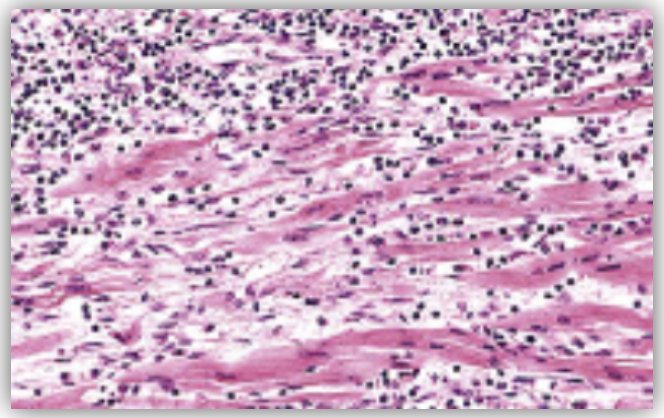
Take Less Notes
(e.g. buzzphrases)

Acquired Dilated Cardiomyopathy (viral myocarditis) associated with a lymphocytic infiltrate

Coxsackie virus infection



- Myocarditis is characterized by an interstitial inflammatory infiltrate associated with focal myocyte necrosis.
- A diffuse, mononuclear, predominantly **lymphocytic infiltrate** is most common



NBME Vignettes: **Pearls, Pitfalls** and **Lessons Learned**

Sample problems: ***Application of Principles***

NBME Vignettes: **Pearls, Pitfalls** and **Lessons Learned**

Data abnormal, normal > Physical Exam abnormal, normal > Verbiage Demographic, Tomfoolery

Howard J. Sachs, MD
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