OREGON HEALTH & SCIENCE UNIVERSITY
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Expect the Unexpected: An Atypical Cause of Fatigue in the Elderly

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Learning Objectives

•Understand the importance of a broad differential when approaching fatigue in an elderly patient.

•Recognize subacute bacterial endocarditis as a source of fatigue in the elderly.

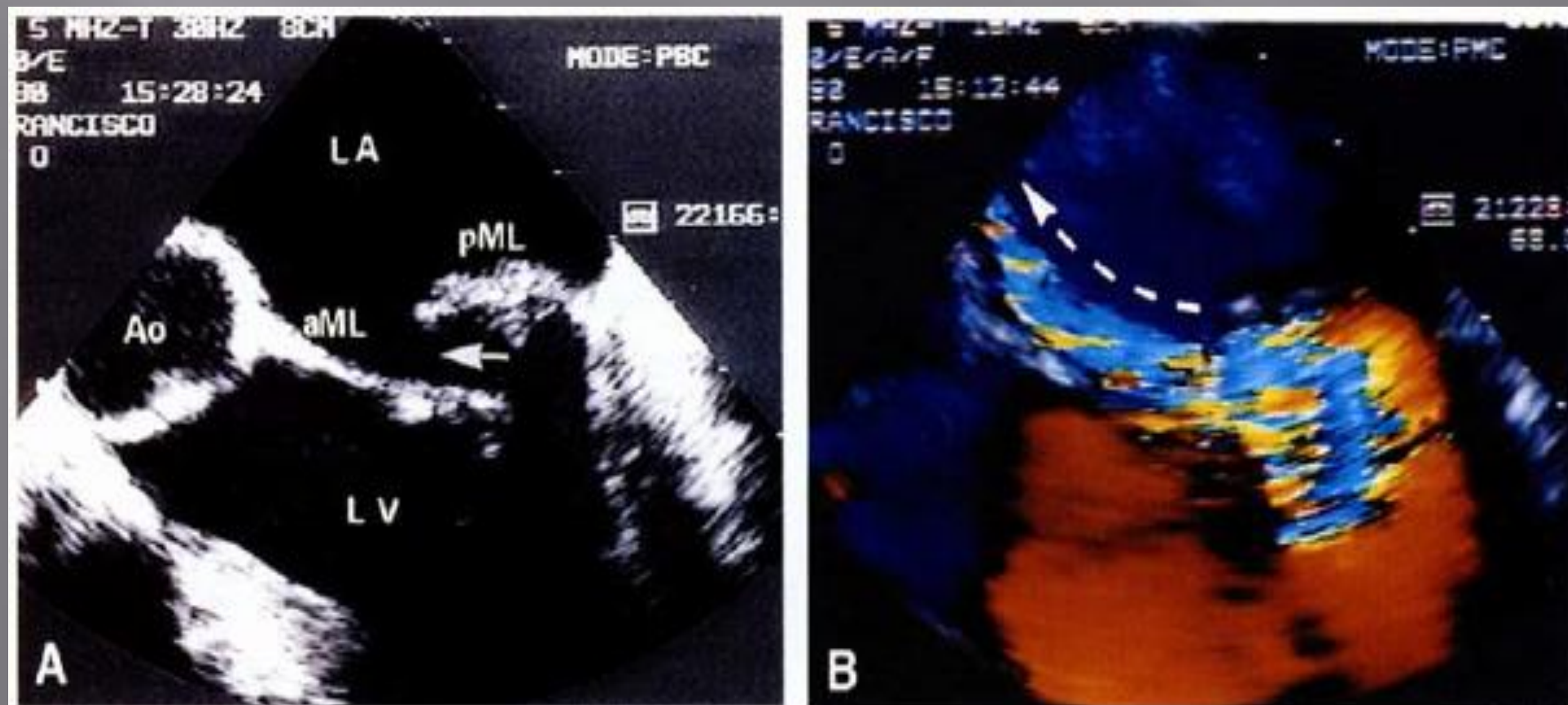
•Early recognition and appropriate treatment of infective endocarditis in the elderly despite atypical presentations, in order to reduce mortality.

Clinical Presentation

•An 81 year old, previously very active woman with a history of hypertension presented to the emergency department for evaluation of one month of progressive, debilitating fatigue.

•She had undergone prior workup with her primary care provider and CBC, CMP, TSH, CT abdomen, and urinalysis were unremarkable.

•Aside from severe fatigue, increasing chronic lower back pain, and difficult to quantify weight loss, review of systems was otherwise negative.



Flail mitral valve as seen on transesophageal echocardiogram

Objective Data

•Vitals on Presentation:
- •Afebrile, BP 168/65, HR 99, RR 25 and normal SpO2 on room air.

•Physical Exam:
- •Notable for 3/6 systolic murmur at the apex with axillary radiation, bilateral faint upper airway wheezing, JVP of 15cm, and trace bilateral lower extremity edema.

•Presenting Labs and Additional Studies:
- •Normal white blood cell count with few immature granulocytes on differential, Hgb of 8.6 g/dL, total protein of 6.9 g/dL, albumin of 2.4g/dL, and normal chemistries, troponin, and urinalysis.
- •Normal chest X-ray and ECG. Telemetry notable for short, asymptomatic runs of supraventricular tachycardia.

•Additional Workup
- •Normal SPEP/UPEP, normal CT chest/abdomen/pelvis.
- •Blood cultures positive for *Streptococcus mitis.*
- •TTE showing flail mitral valve.

Differential and Diagnosis

•Concern for malignancy in the setting of her age, fatigue, weight loss, increasing low back pain, and elevated protein gap.

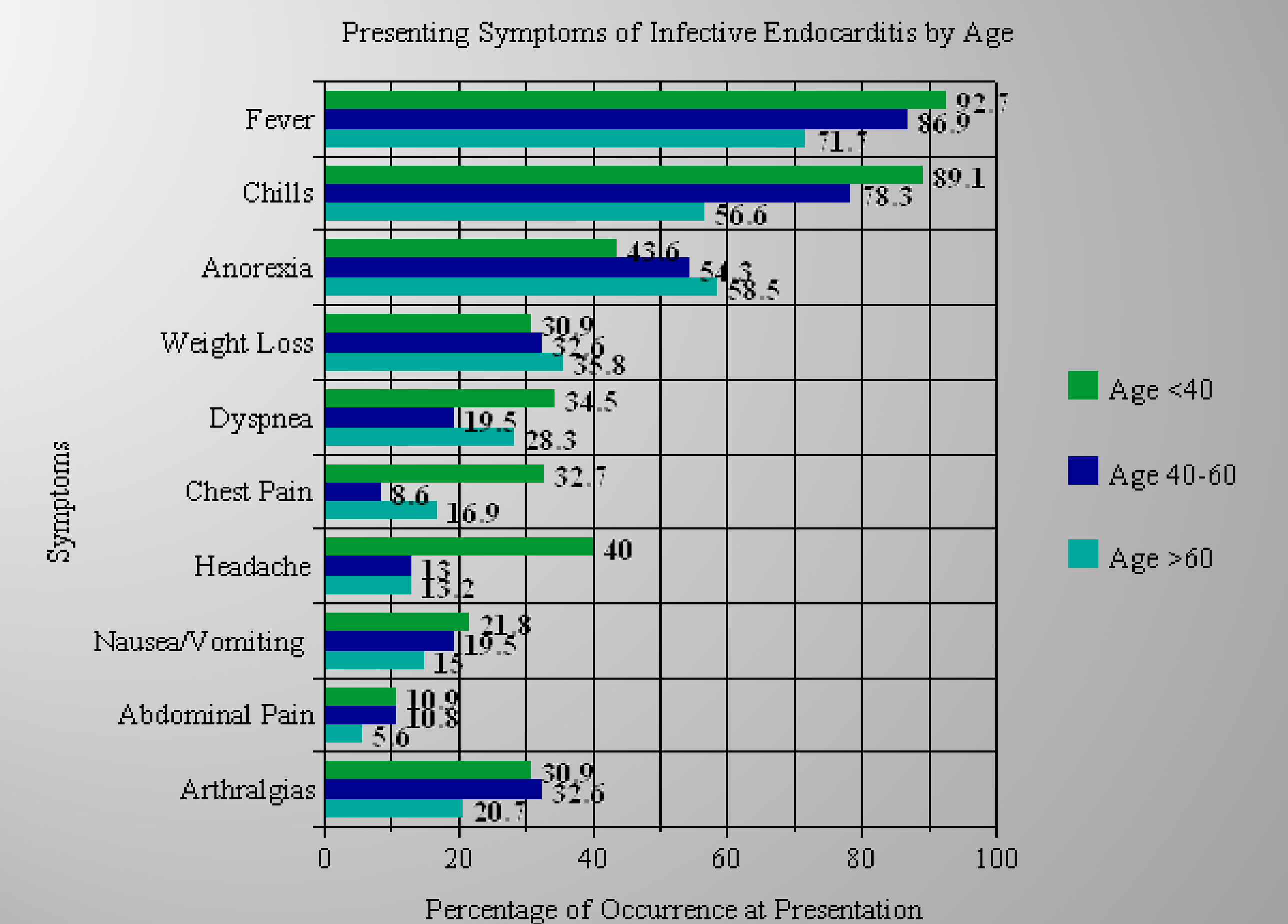
•Murmur and elevated JVP suggested new heart failure, but she denied dyspnea, orthopnea, or PND and this was not supported by initial radiographic findings.

•Although afebrile, infection was considered, prompting blood cultures which were ultimately positive.

•She was started on continuous penicillin G and treated with furosemide for worsening volume overload in the setting of valvular damage.

Discussion

•Global epidemiology suggests endocarditis is presenting in increasingly older populations, 38% of new cases occur in patients over 70.
•Age related valvular degeneration and increasing number of procedures are contributing to this increase.
•Infective endocarditis often presents atypically in the elderly, with vague symptoms such as fatigue, weight loss, and confusion.
•Lack of recognition delays diagnosis, leading to increased mortality over other demographic groups, even when controlled for age.
•Clinicians must look beyond typical concerns such as malignancy and normal aging when presented with an elderly patient with fatigue.



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