



Infective Endocarditis Involving Mitral Annular Calcification Leading to Abscess Formation Rupture Into Pericardium

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A 87-year-old woman presented with *Streptococcus agalactiae* bacteremia and mobile vegetation attached to mitral annular calcification (MAC) of the posterior mitral valve (**Figure**). Despite intensive care, she died due to cardiac tamponade on the fourth day.

Autopsy indicated vegetation of the posterior mitral valve and perivalvular abscess superimposed on MAC, with the abscess penetrating into the pericardial cavity, causing hemopericardium (**Figure**). MAC was massive, with maximum thickness 8 mm, and located in the base of the posterior mitral leaflet in C-shape.

Perivalvular mitral ring abscess fistulized to the pericardial cavity is a rare and lethal complication that occurs in <1% of cases of infective endocarditis (IE), with *Staphylococcus aureus* being the most commonly associated microorganism (46%).¹ *Streptococcus agalactiae*, also known as group B *Streptococcus* colonizing the human

genital and gastrointestinal tracts, frequently can lead to serious neonatal infections. Recently, invasive infections due to *Streptococcus agalactiae* in aged adults have been reported. Although MAC has been considered a relatively benign pathology of the elderly, it has also recently been reported as an underestimated predisposing factor and poor predictor for IE.² *Streptococcus agalactiae* and MAC should not be ignored in aged patients with IE.

Disclosures

The authors declare no conflicts of interest.

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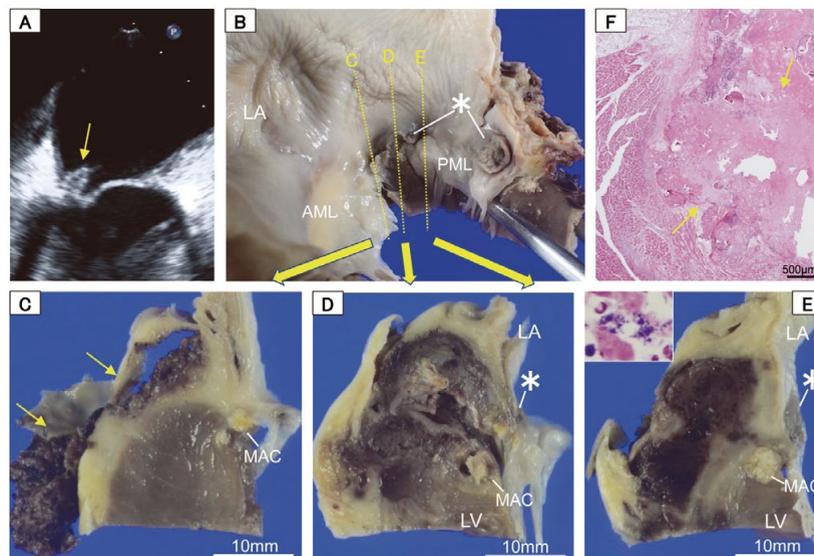


Figure. (A) Transesophageal echocardiography showing a 0.9-cm mobile vegetation attached to mitral annular calcification (MAC) of the posterior mitral leaflet (PML; arrow). (B) Large bacterial vegetation (*) on the PML. (C–E) Serial longitudinal sections of the posterior mitral valve-attached vegetation (*). (C) Rupture site of the perivalvular abscess of the coronary groove causing hemopericardium (arrows). (D) Massive hemorrhage of coronary groove and MAC. (E) Perivalvular abscess superimposed on MAC, continuity of vegetation (*). (Inset) Proliferation of Gram-positive cocci in vegetation (Gram stain). (F) Dystrophic calcification of the mitral valve ring (arrows; H&E). AML, anterior mitral leaflet; LA, left atrium; LV, left ventricle. Scale bars: C–E, 10mm; F, 500µm.