Mitral stenosis with smoking mitral valve
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A 39 year-old female was admitted with complaints of dyspnoea on exertion (NYHA-II) for one year. The patient also had history of orthopnoea and paroxysmal nocturnal dyspnoea. She was in atrial fibrillation with a heart murmur consistent with mitral stenosis. TTE showed a dilated left atrium with severe rheumatic mitral stenosis (MVA 0.8 sq cm). Marked spontaneous echocardiographic contrast in the left atrium flowing through a stenotic mitral valve was seen, giving the appearance of a “smoking mitral valve” (Figure 1 and 2). Transoesophageal echocardiography (TEE) corroborated the finding of TTE including spontaneous echocardiographic contrast (SEC) in left ventricle. In conditions with slow blood-flow or stasis, spontaneous echocardiographic contrast is seen, which is a characteristic echocardiographic phenomenon with a very distinct smoke-like swirling pattern. SEC is an indicator of increased thromboembolic risk.
Figure 2: Parasternal long-axis view showing thickened calcified rheumatic mitral leaflets with dilated left atrium, hockey stick shaped anterior mitral leaflet and “smoking mitral valve”.

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Nil.

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