

## Transformation from Myositis to Mycotic Aneurysm in Infective Endocarditis

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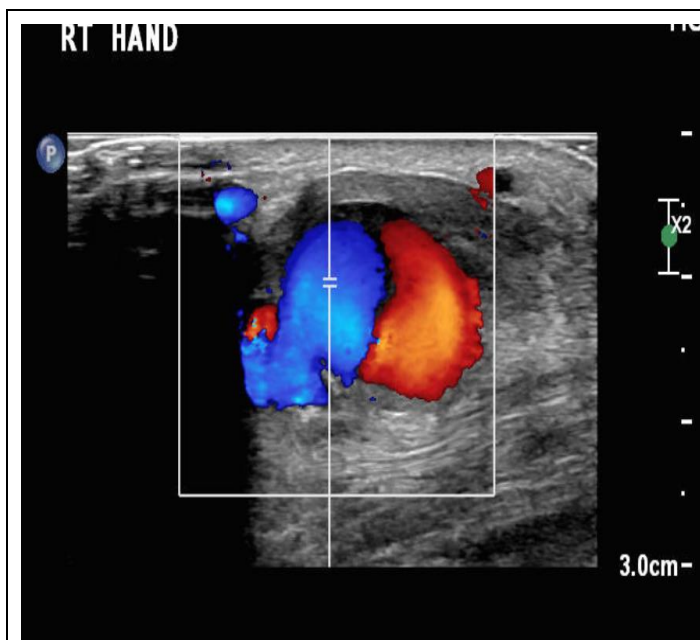
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**Figure 1:** Comparison of bilateral hands.



**Figure 2:** Janeway lesions; First dorsal web space fullness.



**Figure 3:** Ultrasound of right hand demonstrating a pulsatile lesion in continuity with radial artery, with bidirectional flow noted on Doppler imaging suggestive of an aneurysm.



**Figure 4:** MRI of right hand showing 2.7 x 1.9 x 1.8 cm heterogeneous mass with enhancement between the 1<sup>st</sup> and 2<sup>nd</sup> metacarpals, in keeping with an aneurysm arising from the radial artery / deep palmar arch.

## Clinical Image

A 61-year-old man with mitral valve prolapse presented with 1-week history of fever, palmar rashes and pain over the right thenar eminence. On admission, he was found to have a pansystolic murmur and haemorrhagic macules over his palms. A painful, non-pulsatile swelling was noted at the right thenar eminence.

Echocardiography revealed a 0.6 x 0.4cm vegetation on the anterior mitral valve leaflet and severe mitral regurgitation. Magnetic resonance imaging (MRI) revealed an irregular intramuscular collection between the right 1st and 2nd metacarpals. Computed Tomography (CT) and MRI revealed scattered infarcts in the liver, kidney, spleen, and brain. Two sets of blood cultures were positive for cloxacillin-sensitive *Staphylococcus aureus*. Fever resolved following IV Cloxacillin.

On the 3rd-week of antibiotic treatment, the right thenar eminence swelling had enlarged and was pulsatile (Figure 1 and 2). Ultrasound and MRI confirmed the presence of right radial artery aneurysm (Figure 3 and 4). Surgical excision and repair excision was performed.

Mycotic aneurysms of the peripheral arteries are rare and can lead to significant complications e.g. haemorrhage and limb loss. To the best of our knowledge, there are very limited reports regarding transformation of myositis to mycotic aneurysm. Thus, early detection and intervention are crucial to ensure optimum outcome.