ANSWER

The correct answer is: Atrioventricular dissociation due to complete heart block causing diastolic mitral regurgitation (MR).

Explanation:

The diastolic timing of MR can be appreciated in the movie clip (slide 1) also, but it is easier to appreciate it in the still image of color Doppler (slide 2- please note the position of the red cursor just before the QRS complex on the ECG) and in color M-mode (slide 3). In the color M-mode, one can notice that in the second and third cardiac cycles, P-wave interrupts the diastole, which is followed by a significant delay before the nodal escape QRS appears. During this period, the left ventricular (LV) diastolic pressure is augmented by the atrial systolic emptying and then, as the left atrium (LA) starts to relax after the P-wave, LV-LA pressure crossover occurs causing diastolic MR. Since the LV systole is markedly delayed, pressure rise in the LV is insufficient to generate enough force required for closing of the mitral leaflets.

CORRECT ENTRIES

We received correct responses from the following-

L-238	Rajesh	Shah
L-1704	Mohsin	Ansari
TM-066	Chandan	Kumar
AM-78	Kumar	Anshuman
TM-073	Keshav	Sharma
L-297	Shanmugasundaram	Somasundaram
L-1977	VInayak	Desurkar
L-1669	Gagan Pal	Singh
L-2023	Debabrata	Bhunia
L-2085	Jignesh	Parikh
L-2146	umesh	khedkar
L 1958	KAUSHIK	SHETH
L-2130	Nikhila	Pachani
L-707	Rajeev	Agrawal
L-629	Sangeeta	Porwal
L- 80	DHANALAKSHMI	CHANDRASEKARAN
AM-37	gayathri	krishnamurthy