

3. The defibrillator lead is likely near the tricuspid annulus

This case illustrates the withholding of defibrillator therapy in the setting of crosstalk on the ventricular lead. Because the lead is near the annulus, both atrial and ventricular signals are sensed by the ventricular lead, leading to double counting.

In the annotated Figure 59.5, there are 2 near-field ventricular EGMs for every atrial or far-field ventricular EGM. Answers 1 and 4 are incorrect because the deflection in question bears no particular relationship to either the far-field V, which is not wide, or the T wave. This finding is most consistent with crosstalk on the ventricular lead. Crosstalk is

the inappropriate sensing of far-field signals from the opposite chamber. It often occurs in the context of atrial pacing or an annular (or too basal) location of the ventricular lead.

Miscounting of atrial for ventricular signals resulted in this patient intermittently having R-R rates that alternate between the ventricular fibrillation zone and ventricular tachycardia. The rhythm does not consistently meet rate criteria for ventricular fibrillation (in which discriminators do not apply), and thus SVT-VT discriminators can be applied during the redetection phase.