

**Title : MRI of Arrhythmogenic Right Ventricular Dysplasia  
By Harikrishna Tandri MD**

**Arrhythmogenic right ventricular dysplasia (ARVD).** ARVD is characterized by enlargement, dysfunction and fibrofatty infiltration of the right ventricle (RV). It is recognized clinically by ventricular tachyarrhythmias, abnormal RV morphology and RV dysfunction. Although rare, it may be responsible for 5% of sudden cardiac death due to arrhythmias among young people in certain populations. Fibrofatty tissue might have a role on the development of cardiac arrhythmias. The primary diagnostic features of ARVD are a) enlargement and dysfunction of the right ventricle out of proportion to LV dysfunction, b) regional aneurysm formation or wall motion abnormalities. Fatty infiltration on MR imaging is poorly reproducible among observers and is therefore not considered a criterion for the disease. It can also occur in other circumstances such as steroid use and obesity. Small amounts of RV fat with normal RV function are seen in normal individuals, but individuals with large amounts of RV fatty infiltration and normal function may be seen. The diagnosis of ARVD is difficult to make in early stages and MRI and is diagnosed using the Task Force Criteria.

**Who Will Benefit From This Information?**

Radiologists and cardiologists who interpret MRI for suspected ARVD will benefit from this information

**How was the problem determined? How is this addressed in this talk?**

Several cases of misdiagnosis of ARVD, both over and under diagnosis have resulted from the interpretation of MRI. The difficulties in differentiating physiologic fat infiltration from pathologic fat in ARVD and the difficulties in interpreting RV wall motion are addressed in this talk. Cases that illustrate the overlap between physiology and pathology will be showcased to illustrate this point.

**What will learners be able to do differently because of this information?**

Learners will understand the strengths and the limitations of MRI and use the information judiciously in conjunction with clinical information for patient management.