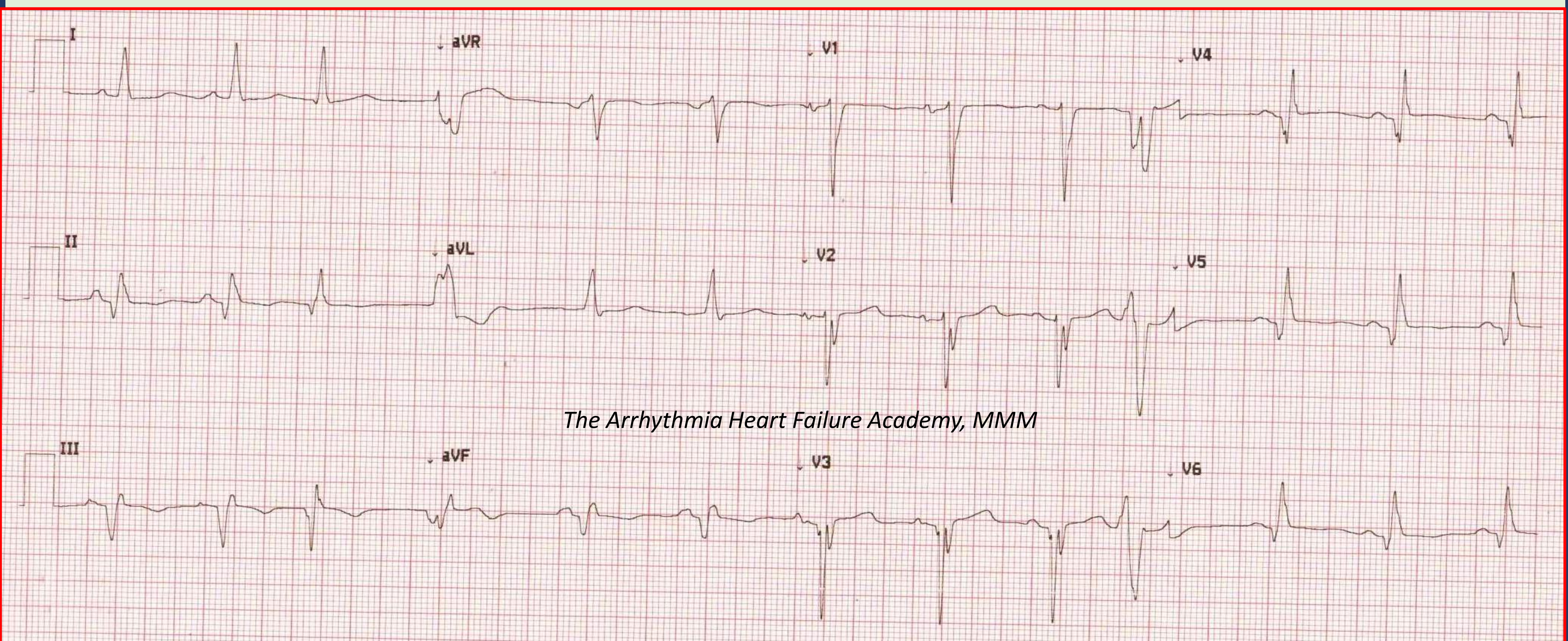


CLINICAL BACKGROUND

A 61 year old male, K/C/O systemic hypertension, CAD- OLD AWTMI+IWMI, EF: 40 % presented with C/O giddiness, NYHA class III to IV dyspnoea

CASE DISCUSSION

Surface ECG is an easy and non-invasive diagnostic tool improves the risk prediction of SCD. In most of the settings prolonged QRS signifies high risk for SCD. Fragmented QRS complex (f QRS) defined as the presence of various RSR' pattern is thought to result from disrupted electrical conduction in areas of diseased or fibrosed myocardium. The same can be a pathophysiological correlation to re-entrant arrhythmias. Fragmented QRS is considered a reliable ECG sign of underlying myocardial scar. Studies have shown f QRS to be related to SCD as well as ICD shocks. T wave alternans and short coupled VPC also predict SCD risk in CAD. The patient underwent AICD (Biotronik Itrevia 5 VR-T DX) implantation for primary prevention of SCD. During the follow-up over 2 years, he had six monomorphic ventricular tachycardia requiring AICD shocks which had saved his life.



CONCLUSION

The ECG signs of risk for SCD are: pathological Q waves, persistent ST elevation, fragmented QRS complexes, T- wave alternans and PVCs. Even though guideline recommend AICD for primary prevention of SCD in patients with EF < 35%, it may be appropriate to consider AICD in select patients with EF > 35% when clinical status and ECG signs are taken to consideration