Development of a Non-Sustained Ventricular Tachycardia treatment pathway

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INTRODUCTION

Non-sustained Ventricular Tachycardia (NSVT) is defined as an ectopic ventricular rhythm faster than 100bpm lasting for at least 3 beats and self-resolving within 30 seconds1. In many conditions, NSVT is associated with an increased risk for further sustained arrhythmias and sudden cardiac death2.

The increasing number of cardiac implantable electronic devices (CIEDs) worldwide is leading to increased detection of NSVT.

Detection of NSVT may require admission to hospital, insertion of an implantable cardiac defibrillator, up-titration of medication, cardiac imaging, or may be considered benign depending on the individual presentation. A structured step-wise approach is recommended3, however this approach requires significant time and often senior expertise to complete correctly.

AIMS

The aims of this project were to create a guideline document and treatment pro forma for detected NSVT within the cardiac device clinic of a tertiary referral London Hospital.

METHODS

Following the identification of a clinical need for a systematic evidence-based treatment approach, a working group was created consisting of senior and junior cardiology medical staff and a highly specialised cardiac Physiologist.

RESULTS

We performed an audit looking at the presentation and treatment of NSVT within a historical one-week window in the Cardiac device clinic.

NSVT was discovered in 18 patients with differing CIEDs (9 PPMs, 4 ICD, 4 CRT-D, 1 CRT-P). All NSVT was detected during routine device interrogation by the cardiac physiology staff. (Figure 1)

Treatment of these patients varied between urgent admission, immediate registrar review, e-mail to consultant, and routine follow-up. Records of treatment plans were not being consistently recorded.

CONCLUSION

A treatment pro forma was created to improve clinical outcomes of NSVT by a newly established working group.

REFERENCES

https://bestpractice.bmj.com/topics/en-gb/831

Figure 1: Detected NSVT and corresponding CIED

Figure 2: Final NSVT Treatment pro forma