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Brief Report

PVCs: Treat or Ignore -

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INTRODUCTION

PVCs are the most common type of dysrhythmias. Other names for PVCs are, premature ventricular complexes, premature ventricular beats. PVCs sometimes described as extra-systoles. PVCs begin in the ventricles earlier than the next expected regular beat. PVCs are common, usually do not cause harm and associated with a benign prognosis.

They sometimes cause feeling of palpitation, described by some patients as pounding or describe it as the heart is jumping or a heartbeat is skipped. The extra beat is followed by a stronger heartbeat, which creates the feeling of a skipped beat. PVCs usually do not cause enough stroke volume sufficient for the body.

12-lead ECG in normal people, shows 1% prevalence of PVCs. Holter monitor of people who are normal clinically shows 40–75% prevalence of PVCs. Complex and frequent PVCs may occur in 1-4% of the apparently healthy general population.

Pathway of normal electrical impulses could be interrupted by heart disease (especially causing scar) which trigger PVCs. Other causes include hypoxemia, (which may occur in patients with COPD). Some decongestant flu medications trigger PVCs. Also, excess adrenaline, (induced by caffeine, exercise or anxiety) may induce PVCs. Other causes include high BP, alcohol, and anemia and tobacco use [1].

In general, no treatment is necessary if PVCs are occasional, asymptomatic or patients do not have structural heart disease. PVCs could be treated by decreasing caffeine, tobacco, alcohol, stress and anxiety.

Beta blockers and calcium blockers are recommended to treat frequent PVCs. Catheter ablation may be indicated for patients with severe symptoms. Radiofrequency energy is used to target the focus of PVCs. PVCs may be a warning sign for a worse dysrhythmias in heart failure (or other cardiac disease) patients.

In patients without structural cardiac disease, PVCs (even frequent PVCs) have a benign outcome [2]. Frequent PVCs in patients with history of myocardial infarction, increase their risk of sudden death. PVCs in patients with cardiac ischemia, carry less benign prognosis.

Recent studies showed that in certain cases of LV dysfunction caused by frequent PVCs, treatment by drugs or ablation may result in improvement of cardiac function.

Hypertension may induce frequent PVCs. SBP level was related to the PVCs prevalence [3].

Antiarrhythmic medications have a pro-arrhythmic effect [4], so, it's not necessary to treat PVCs except when they cause significant symptoms or complication. In some cases, ventricular dilation and dysfunction (tachy-cardiomyopathy), may occur due to very frequent PVCs, which is considered an indication to use drug therapy or ablation of PVCs, even if the patients are asymptomatic.

Conclusion: Patients with frequent PVCs are frequently seen by cardiologists. Conservative measures are usually recommended to treat PVCs (even if they are frequent) because they are usually considered a benign condition. Use of b-blockers may be the only medication needed. Radiofrequency catheter ablation is recommended in patients with frequent PVCs causing symptoms or tachy- cardiomyopathy when they disturb their quality of life. Majority of other patients who do not have severe clinical symptoms are considered to be relatively benign.

ABBREVIATIONS

AHA: American Heart Associations; ACLS: Advanced Cardiac Life Support; COPD: Chronic Obstructive Pulmonary Disease

REFERENCES

1. Douglas L Mann; Douglas P Zipes; Peter Libby; Robert O Bonow; Eugene Braunwald Braunwald's Heart Disease, A textbook of cardiovascular medicine. 10th Edition. Philadelphia, PA: Elsevier/Saunders. 2015.
2. E-Journal of the ESC Council for Cardiology Practice. Jan 2011.
3. Stamler J, Wentworth D, Neaton JD. The Multiple Risk Factor Intervention Trial (MRFIT), JAMA. 1986;256(20):2823-2828.s
4. Ross DL, Cooper MJ, Koo CC, Skinner MP, Davis LM, Richards DA, Uther JB. Proarrhythmic effects of antiarrhythmic drugs. Med J Aust. 1990 Jul 2;153(1):37-47. doi: 10.5694/j.1326-5377.1990.tb125462.x.PMID:2199804.