

DEFINITION

1. **Paroxysmal supraventricular tachycardia** is a disorder of cardiac rhythm characterised by episodes of rapid regular heart contractions. It is also known as **atrioventricular re-entrant tachycardia**.

CLINICAL MANIFESTATIONS

2. The main symptom is the abrupt onset of rapid palpitations, which may also end abruptly after a period of time. The duration and frequency of attacks are variable; they may last for a few minutes or for many hours; they may recur several times in a day or may be separated by many months.
3. The episodes may be accompanied by polyuria, faintness, syncope and chest pain, especially if the rate of tachycardia is very fast.
4. The condition is distressing rather than dangerous. It is not progressive and between attacks there is no residual effect.

AETIOLOGY

5. **Paroxysmal supraventricular tachycardia** is a common arrhythmia. It usually occurs in a heart that is otherwise normal but may be associated with structural abnormalities of the heart, including valve defects, or diseases such as coronary artery disease, thyrotoxicosis and the Wolff-Parkinson-White syndrome. Attacks may start in infancy, childhood or in adult life. Unless it is caused by a structural abnormality of the heart or other disease, its origin is regarded as a physiological happening.
6. The condition is an electrical abnormality, which is due to the repeated circulation of an impulse between the atria and the ventricles. It can only occur if there is, in addition to the atrioventricular node, a second connection between the atria and ventricles. The two pathways differ in their refractory periods and conduction speeds. Tachycardia is initiated when an extrasystole arises at such a time that one pathway is refractory but the other capable of conduction. The pathway with the shorter refractory period must conduct relatively slowly, allowing the other pathway to recover in sufficient time to perpetuate the circus movement.

CONCLUSION

7. **Paroxysmal supraventricular tachycardia** is a condition of rapid regular heartbeats, which usually occur as a physiological manifestation but may be associated with structural abnormalities of the heart.

REFERENCE

Bennett D H. Cardiac Arrhythmias. In: Weatherall D J, Ledingham J G G, Warrell D A (Eds). Oxford Textbook of Medicine. 2nd Ed. 1987. Oxford. Oxford University Press. p13.118–13.135.

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