

Images in clinical medicine



Wolff-Parkinson-White syndrome

 Najlaa Salmi, Zouhair Lakhal

Corresponding author: Najlaa Salmi, Department of Cardiology, Mohammed V Military Hospital, Mohammed V University, Rabat, Morocco. salminajlaa2608@gmail.com

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Wolff-Parkinson-White syndrome

Najlaa Salmi^{1,&}, Zouhair Lakhal¹

¹Department of Cardiology, Mohammed V Military Hospital, Mohammed V University, Rabat, Morocco

&Corresponding author

Najlaa Salmi, Department of Cardiology, Mohammed V Military Hospital, Mohammed V University, Rabat, Morocco

Image in medicine

We report the case of a 59-year-old patient with no cardiovascular risk factors and medical history. He consults in the emergency room for rapid onset of palpitations with precordial pain. Clinical examination was normal. The electrocardiogram shows a short PR interval <120 ms, an initial QRS foot base, enlargement of the QRS complexes with repolarization anomalies. Wolff-Parkinson-White syndrome is defined by the presence of a permeable accessory pathway (Kent bundle) leading to ventricular pre-excitation which bypasses the normal conduction. The ventricular myocardium is therefore depolarized in advance by the accessory bundle, which results in a fusion between the first atrioventricular activation and that the one that passes through the normal pathway. The electric aspect combines a short PR

interval <120 ms, an initial QRS foot base called the delta wave, an enlargement of the QRS complex with frequent repolarization anomalies. The pre-excitation of Wolff-Parkinson-White is usually asymptomatic. Tachycardia and/or arrhythmia may cause the following symptoms: palpitations, dizziness, faintness, syncope, chest pain, and sudden death. It had numerous etiologies: idiopathic, Epstein's disease, coronary artery disease, hyperthyroidism, or high blood pressure.

Episodes of paroxysmal supraventricular tachycardia due to Wolff-Parkinson-White's syndrome can be stopped by any vagal maneuver which slows the heart rate. When these maneuvers are ineffective, drugs such as verapamil and adenosine are usually used to stop the arrhythmia. Arrhythmic drugs can then be taken indefinitely to prevent further episodes. Catheter ablation of the accessory bundle is successful in over 95% of cases.

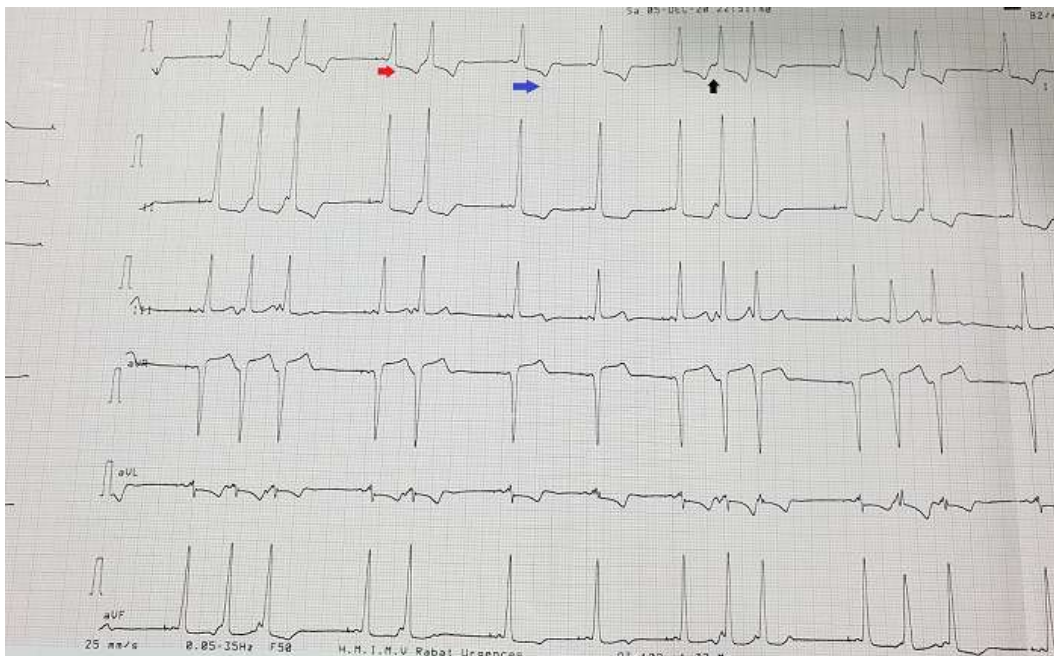


Figure 1: the electrocardiogram shows a short PR interval <120 ms (red arrow), an initial QRS foot base (black arrow), enlargement of the QRS complexes with repolarization anomalies (blue arrow)