

## **Supraventricular tachycardia practical guide for diagnosis and management**

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Supraventricular tachycardia (SVT) is any atrial tachyarrhythmia with heart rate exceeding 100 bpm in rest. The simplest and clinically simple to apply is a division according to QRS duration (width), to SVT with narrow QRS (less than 120ms duration) and wide QRS tachycardias (over 120ms QRS duration). Diagnostic algorithm for SVT differentiation is started by a 12 lead ECG which is interpreted by its QRS duration as a first step in SVT diagnostics. The second step is regularity assessment of the RR interval, while the third step is P wave identification. The last step is assessment of the P wave to QRS frequency ratio. ECG interpretation in these four steps enables SVT identification in most of the patients. In some patients a vagal maneuver or i.v application of Verapamil or Adenosin are needed in order to distinguish the SVT type. The therapy of SVT patients is divided into acute, which goal is to cease the tachycardia onset, and chronic, or ongoing whose goal is to maintain sinus rhythm. The acute therapy is administrated based on the QRS duration and hemodynamic state of the patient. Conclusions: everyday, clinically orientated approach to patients with supraventricular tachycardias is based on simple ECG criteria and not on complex mechanisms of tachycardia origin. The approach based on QRS duration, or QRS morphology divided into wide and narrow QRS complexes is simple and efficient approach for practical diagnostics and therapy of supraventricular tachyarrhythmias.

**Key words:** supraventricular tachycardia, QRS duration and width, tachycardia induced cardiomyopathy.