

Right Bundle Branch Block

Right bundle branch block (RBBB) is a disorder of conduction myocardium arising from impaired cardiac conduction and resulting in delayed depolarisation (and hence the activity) of the right ventricle.

Types

According to the width of the QRS complex, we distinguish **2** types of BPRT:

1. **complete RBBB** (QRS longer than 0.12 s, blockage of the proximal part of the right bundle branch);
2. **incomplete RBBB** (QRS shorter than 0.12 s, blockade of the distal part of the right bundle branch).

The normal width of the QRS complex is 0.06–0.11 s.

Etiology

RBBB alone is haemodynamically insignificant. However, it can signal damage to the **right heart**. RBBB often occurs in:

- chronic cor pulmonale (right heart pressure overload);
- acute cor pulmonale (pulmonary artery embolism, right heart pressure overload);
- atrial septal defect (volume overload of the right heart);
- ischemic cardiomyopathy ;
- cardiomyopathy due to valve defect;
- congenital or idiopathic cardiomyopathy.

An ECG image of RBBB can also occur in healthy people. It is mainly an incomplete RBBB with a normal width of the QRS complex in young endurance athletes (in endurance sports there is a volume load on the right ventricle).

Diagnosis

BPRT diagnosis is based on **ECG**. In the case of a **complete BPRT**:

- **The QRS complex is spread over 0.11 s** (3 small squares);
- in leads **V1 - V2** (right-hand leads, above the right ventricle) we observe the image **rSR'**, the **descending depression of the ST segment** and the **negative wave T** (for a complete BPRT it is typical that **R'** is higher than **r**);
- in leads **V4-V6, I and aVL** (left side manifolds over the left ventricle), are found **deep and wide oscillates with a positive T-wave**.

In the case of **incomplete BPRT**, the QRS complex takes less than 0.12 s.

Differential diagnosis

- Right ventricular hypertrophy,
- intraventricular block,
- non-specific conversion failure,
- Brugado syndrome ,
- preexcitation syndrome ,
- Brugado syndrome/posterior myocardial infarction ,
- ventricular rhythm.

Odkazy

Související články

- Blokáda levého Tawarova raménka
- Antiarytmika
- Převodní systém srdeční
- Poruchy srdečního rytmu

Externí odkazy

- Blokáda pravého Tawarova raménka (TECHmED) (<https://www.techmed.sk/blokada-praveho-tawaroveho-ramenka/>)
- Úvod do EKG – prof. Jan Malík (<http://www.medicalmedia.eu/cs/Detail/1272%7C>)

Použitá literatura

- HOLAJ, Robert. Kardiologický kroužek. III. interní klinika VFN a 1. LF UK v Praze, 2009.
- VILIKUS, Zdeněk. Interpretace EKG v klidu a při zátěži. Ústav tělovýchovného lékařství 1. LF UK a VFN; 2010.
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