

# Ebstein anomaly

**Ebstein's anomaly** ( ICD-10 : Q22.5 (<https://mkn10.uzis.cz/prohlizec/Q22.5>) ) is a congenital cyanotic heart defect characterized by a change in the position of the tricuspid valve (displaced towards the apex of the heart), papillary muscle defects , and which is often associated with an atrial septal defect . The attachment of the septal leaflet of the tricuspid valve is shifted towards the apex of the heart. This leads to enlargement of the right atrium and reduction of the right ventricle, atrialization of the right ventricle, tricuspid valve insufficiency, which eventually leads to right-sided heart failure .

**Echocardiography** (prenatal and postnatal) is the method of choice for diagnosis , but some changes on the ECG are also typical, and there is **an auditory finding** : a systolic regurgitation murmur above the lower sternum from tricuspid regurgitation.

## Therapy

Asymptomatic patients must be monitored, operative intervention is not necessary. Treatment of the defect in symptomatic patients (i.e. developing right-sided heart insufficiency, development of arrhythmias , worsening symptoms such as shortness of breath ) is **surgical** . Its essence is **the closure of the atrial septal defect** and **replacement or plastic surgery of the tricuspid valve** .

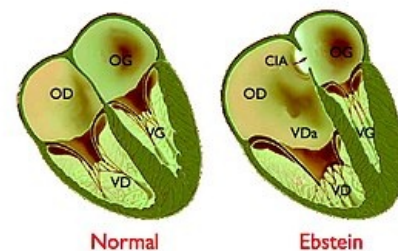
## Links

### Related articles

- Congenital heart defects
- Acquired heart defects
- Heart murmurs

### References

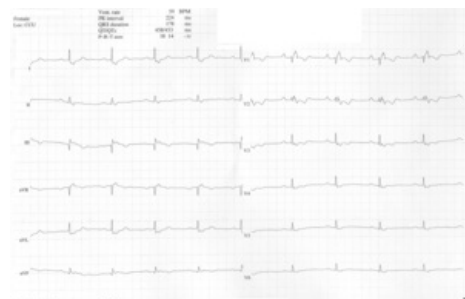
- ZELENKOVÁ, Jitka – VEJVALKA, Jan – HOLÁ, Dagmar, et al. *Pracovní text z Interní propedeutiky : Srdeční vady* [online]. [cit. 2011-03-22]. <[http://int-prop.lf2.cuni.cz/zof/vysetreni/srdceva\\_n.htm#ea](http://int-prop.lf2.cuni.cz/zof/vysetreni/srdceva_n.htm#ea)>.
- VANĚK, Ivan, et al. *Kardiologická chirurgie*. 1. edition. Praha : Karolinum, 2003. 236 pp. ISBN 8024605236.
- HOLST, Kimberly A. – CONNOLLY, Heidi M. – DEARANI, Joseph A.. Ebstein's Anomaly. *Methodist DeBakey Cardiovascular Journal*. 2019, y. 2, vol. 15, p. 138, ISSN 1947-6108. DOI: 10.14797/mdcj-15-2-138 (<http://dx.doi.org/10.14797/mdcj-15-2-138>).



Comparison of the position of the tricuspid valve in the normal heart and in the heart with Ebstein's anomaly



Echocardiography is used for diagnosis



Changes on the ECG