

Practical skills in pathological anatomy-2

MODULE: CARDIOVASCULAR SYSTEM

**Topic №1: Species and morphological characteristics of compensated and decompensated heart defects.
Peculiarity in children.**

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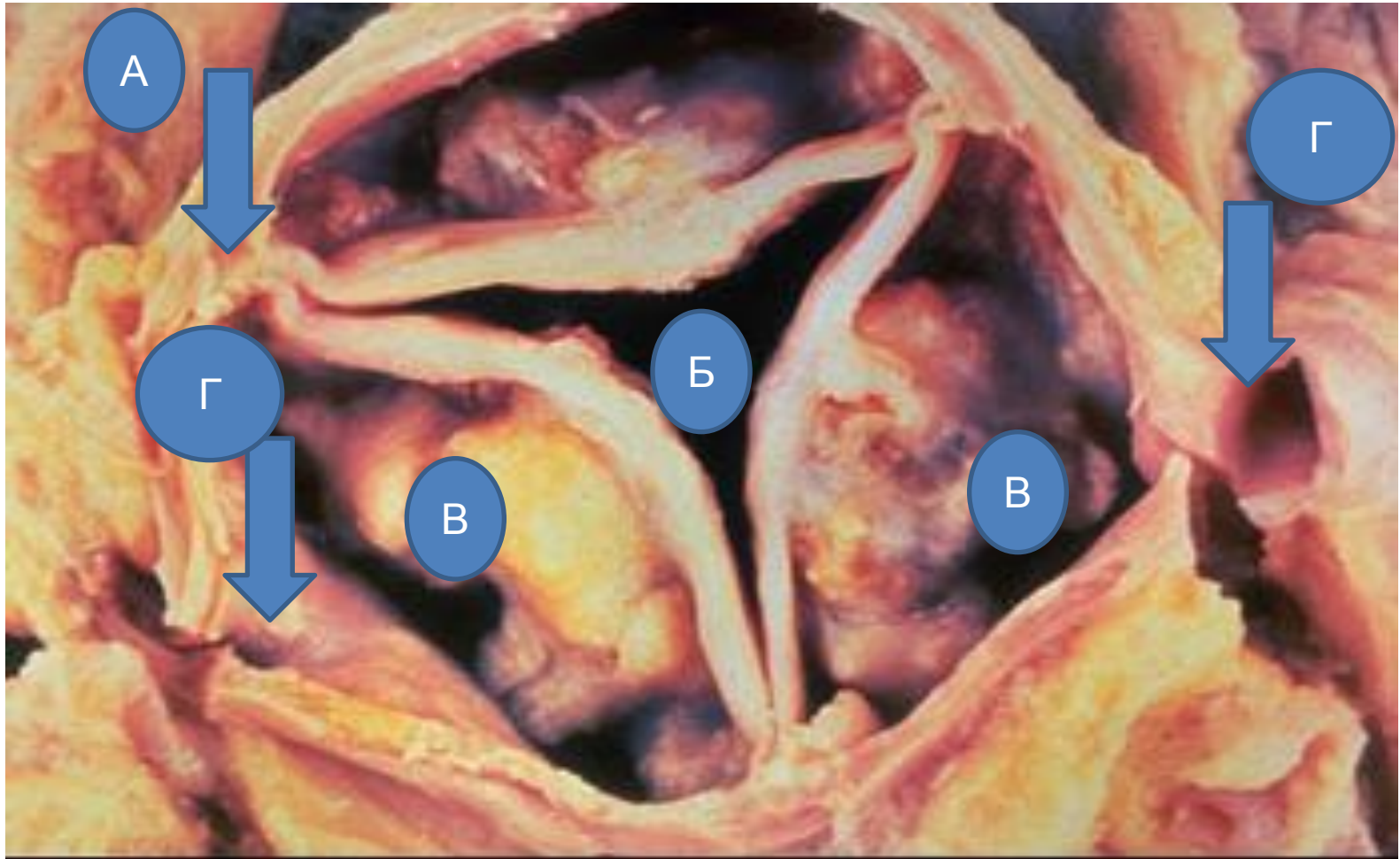
- **The purpose**

- Secure the knowledge of the mechanism of formation of heart diseases and morphological characteristics of compensated and decompensated heart defects, chronic heart insufficiency, peculiarity in children

Learning objectives:

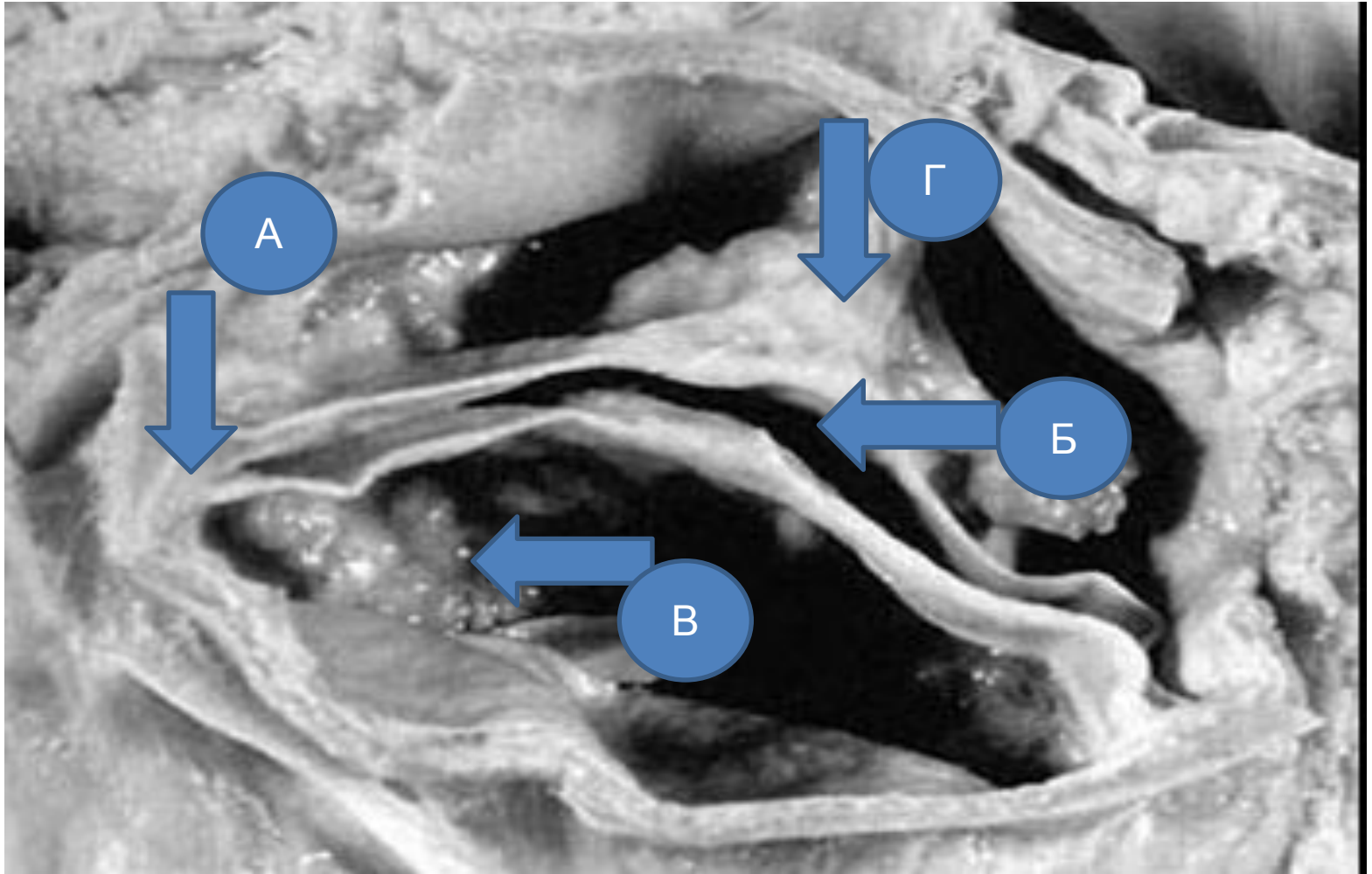
- **The student should know:**
- morphological characteristics of heart defects,
- **The student should be able to:**
- explain the mechanism of heart defects of chronic heart insufficiency.
- interpret the macro- and microscopic picture of changes in the heart and blood vessels during defects and syndrome of acute and chronic heart insufficiency.

Malformation of the aortic valve



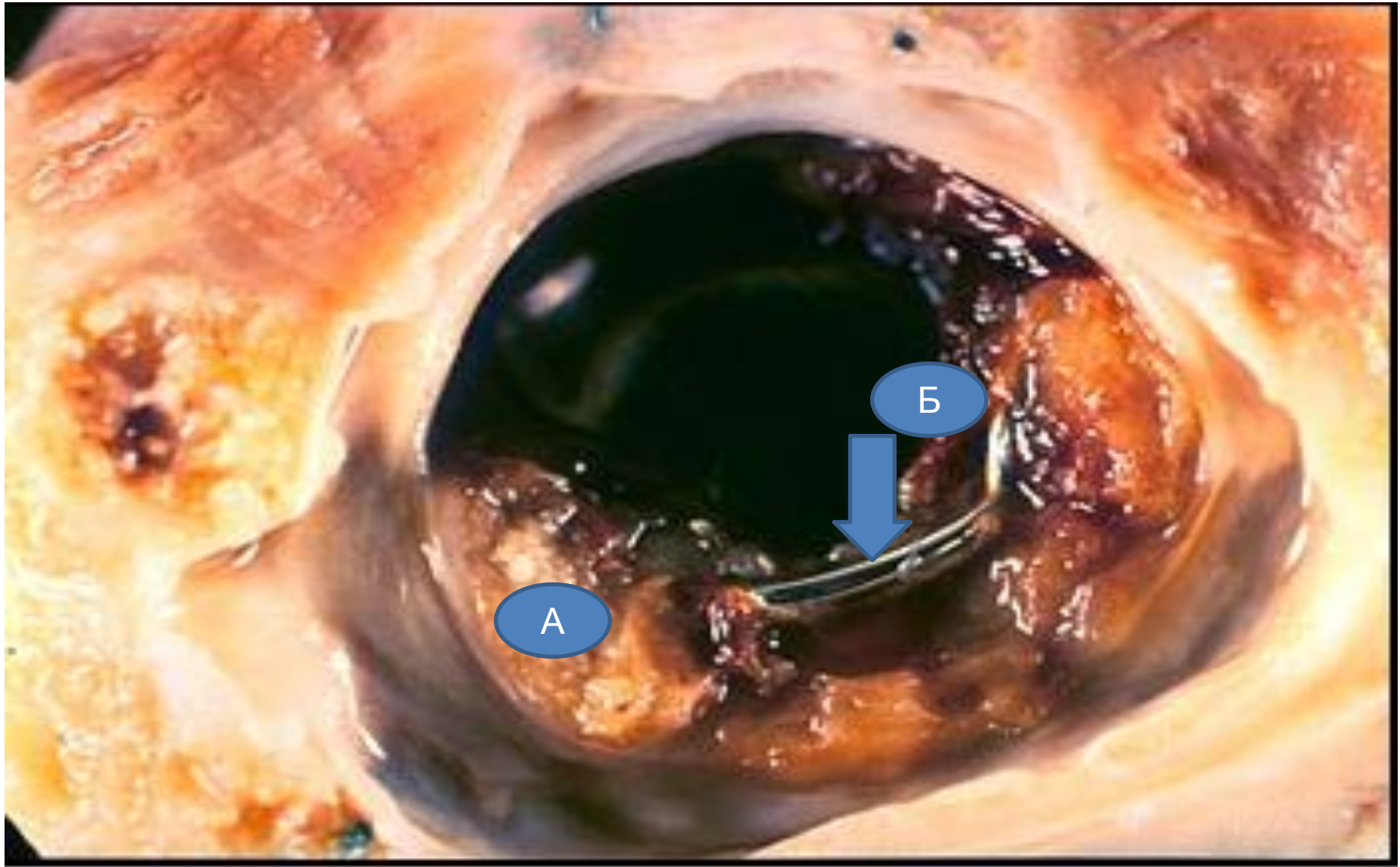
- A. Commissures
- Б. Aortic lumen
- B. Calcific nodules
- Г. Coronary artery origins

Aortic valve



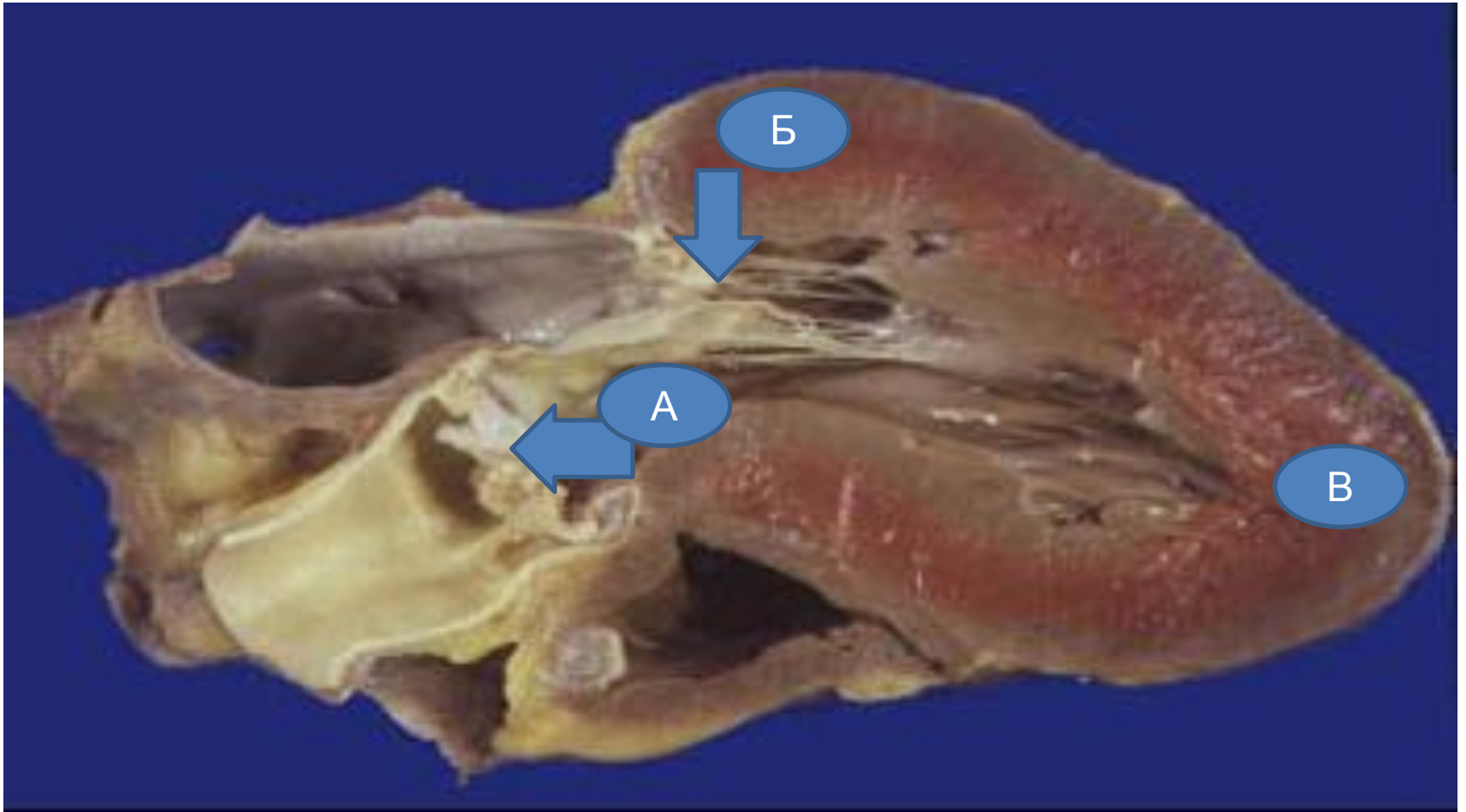
- A. Commissures
- Б. Aortic lumen
- B. Calcific nodules
- Г. Raphe

Aortic valve



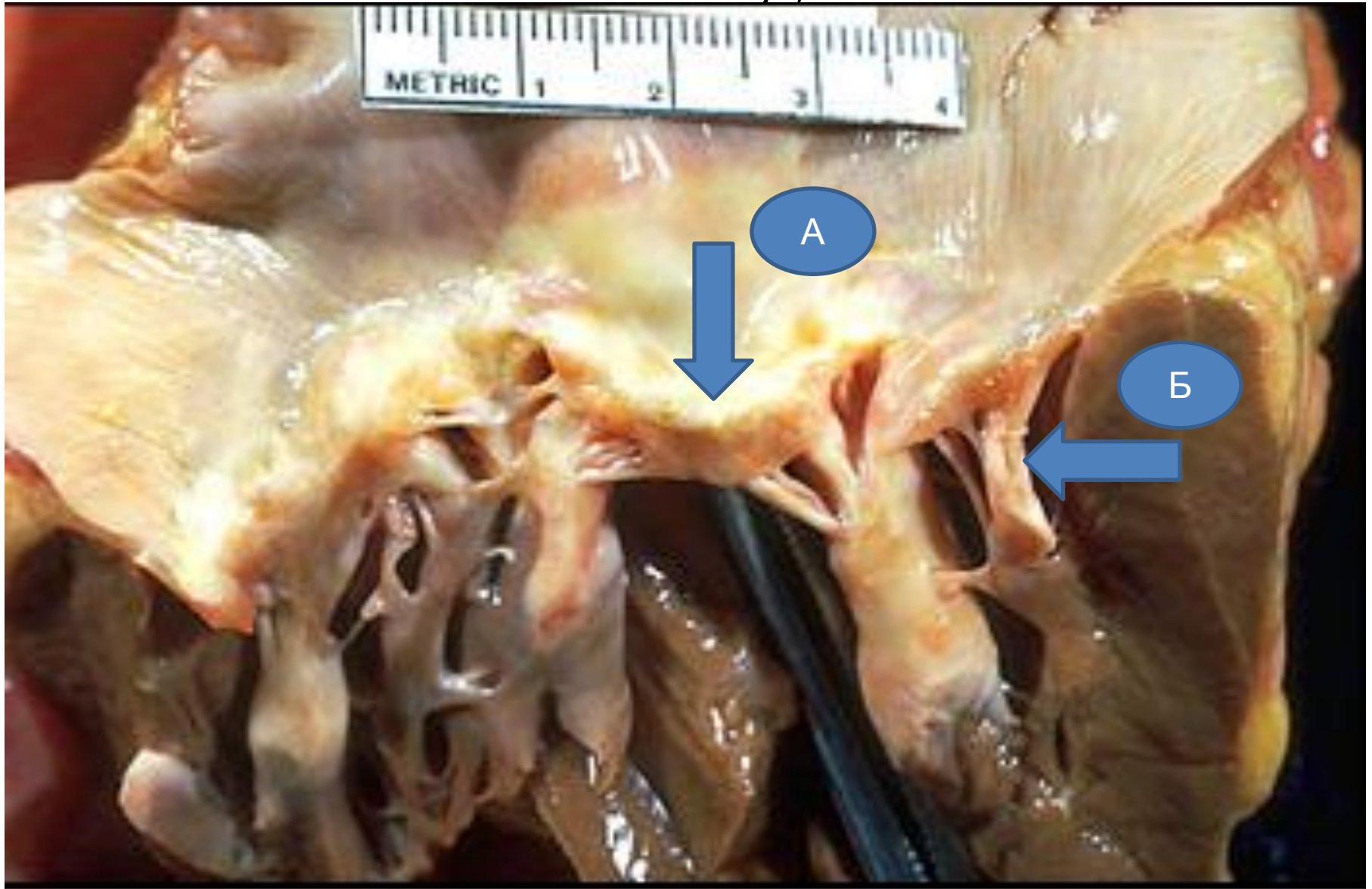
- A. Thrombi
- Б. Metal valve strup

Left ventricular hypertrophy and aortic stenosis with calcification



- A. stenotic aortic valve
- Б. mitral valve
- B. left ventricular hypertrophy

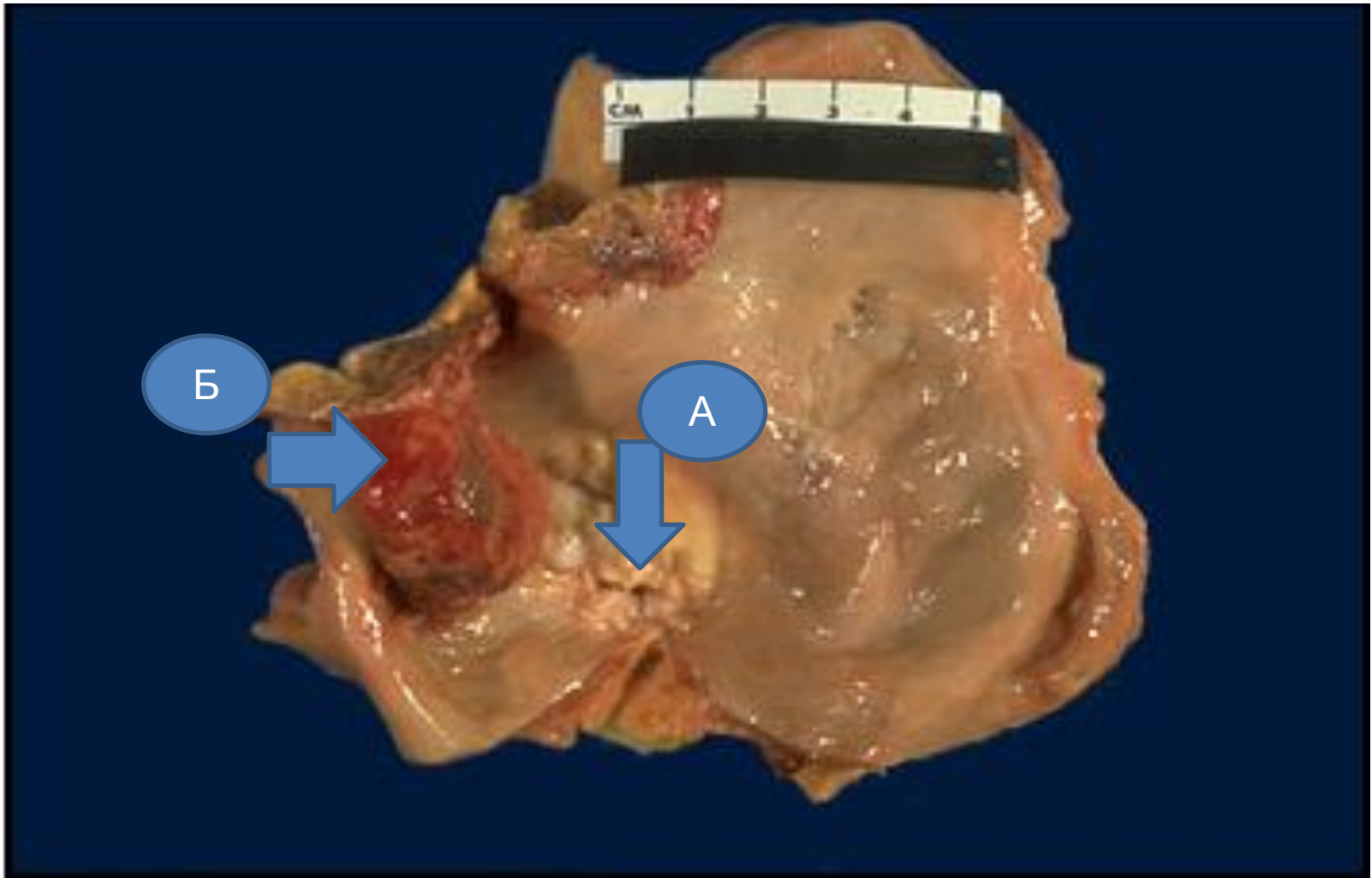
Mitral valve during rheumatism



A. Thickened mitral valve

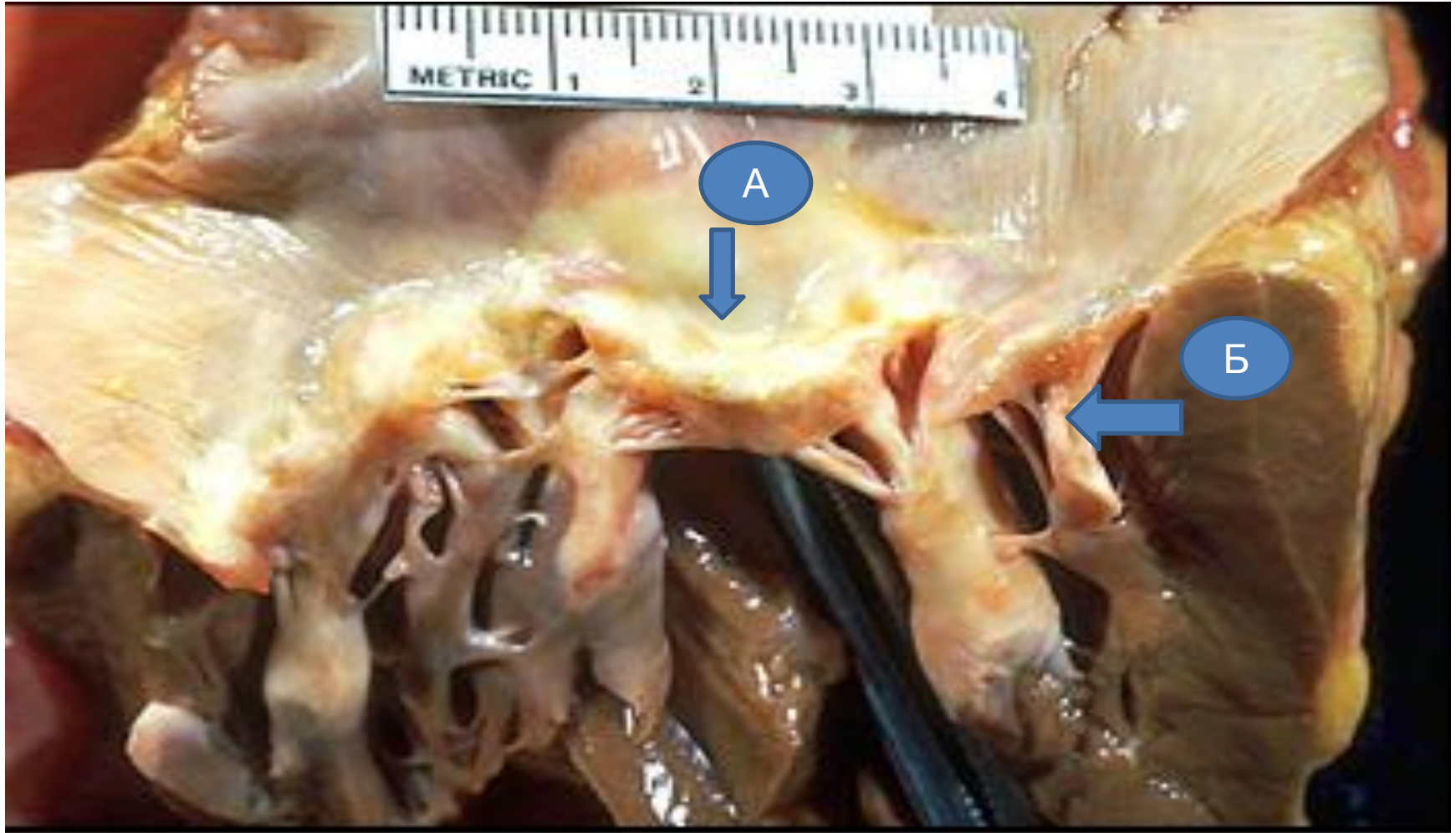
Б. Fibrosis and merging chords

The mitral valve during rheumatism. Changes in the atria



- A. Stenotic aortic valve
- Б. Atrial thrombus

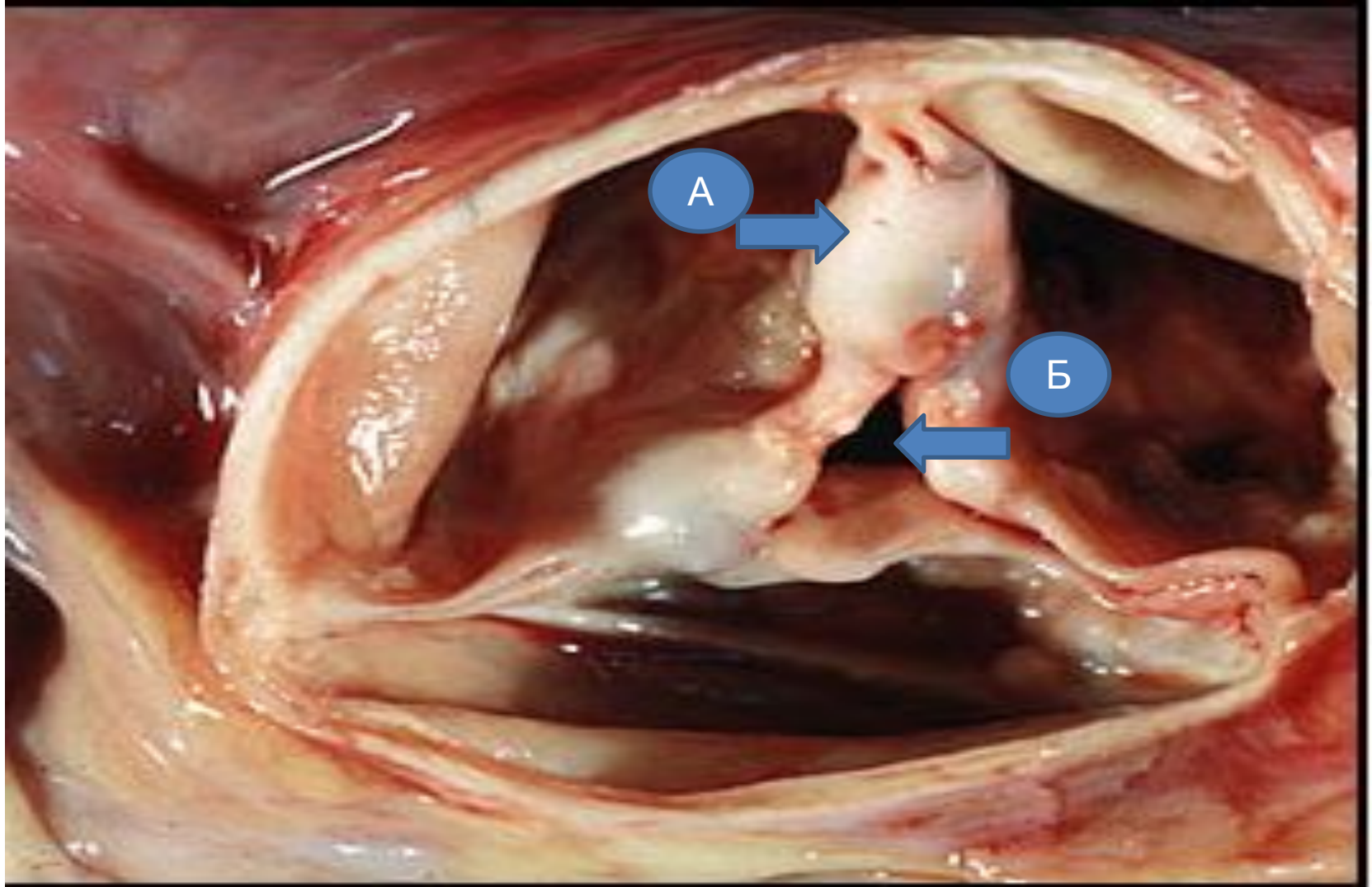
The mitral valve during rheumatism with changed chords



A. Thickened mitral valve

Б. Fibrosis and merging chords

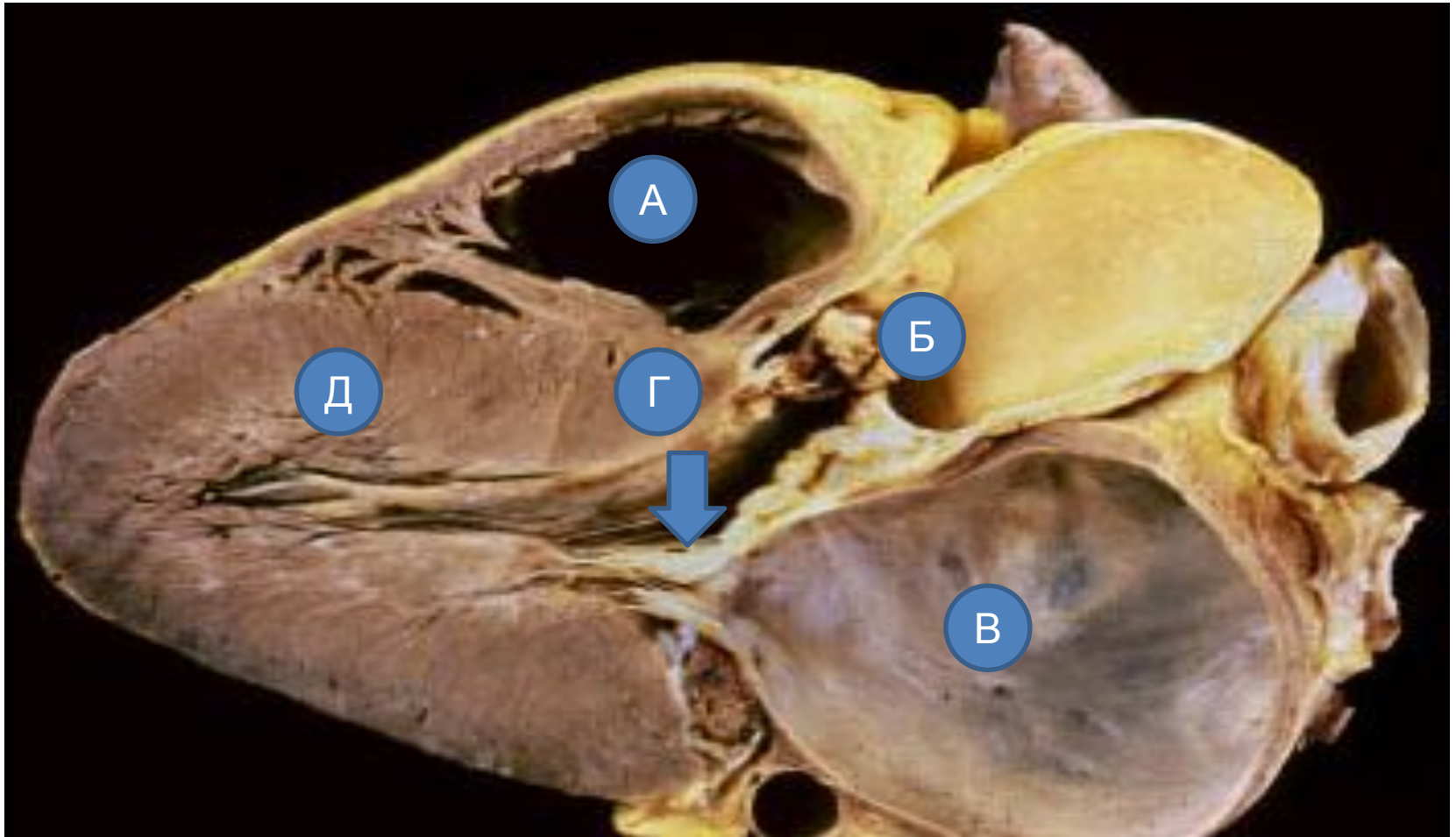
Rheumatic stenosis of aortic valve



A. Merged paired flap

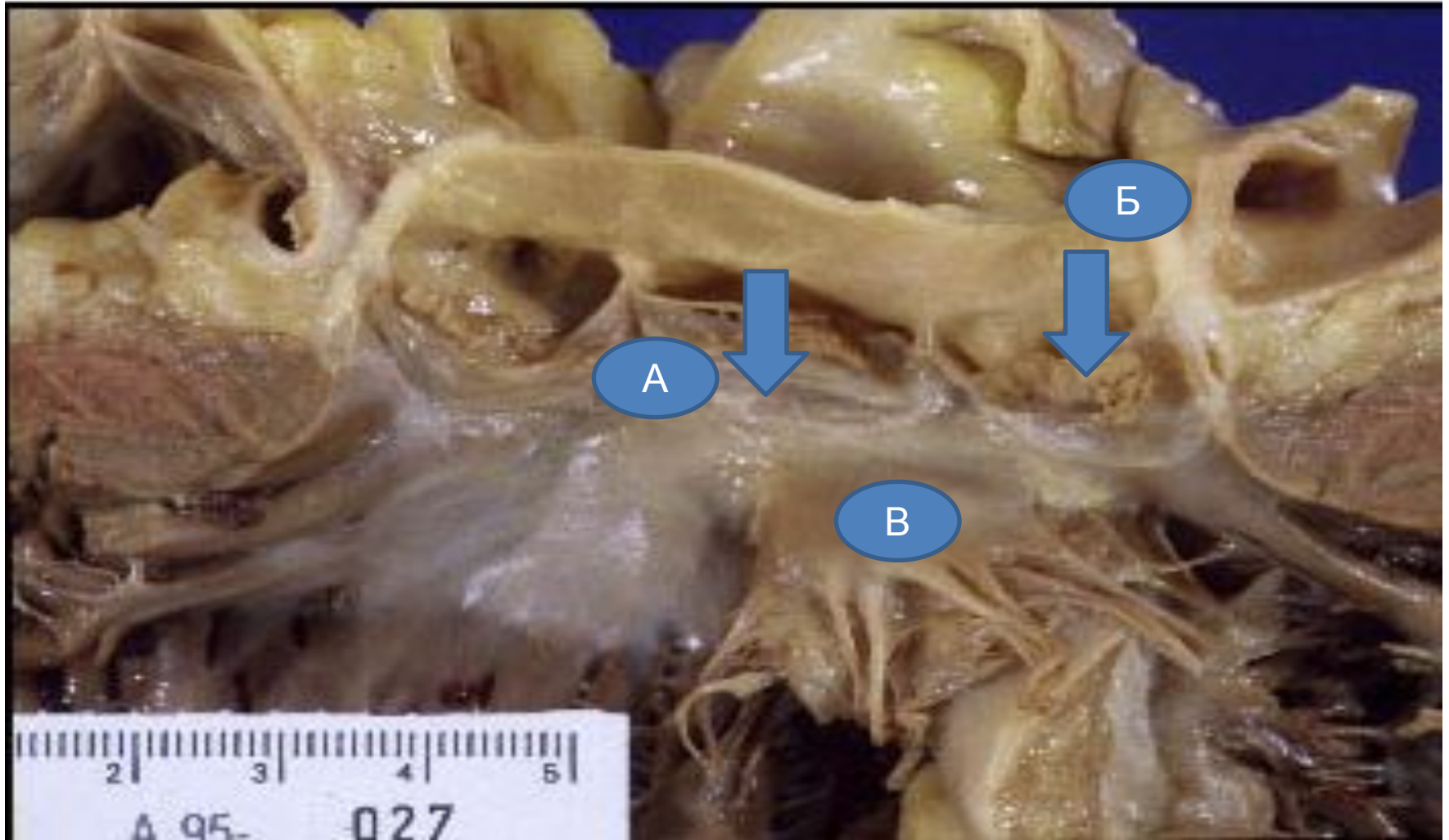
Б. Narrowed foramen

Stenosis of the mitral and aortic valves during rheumatism



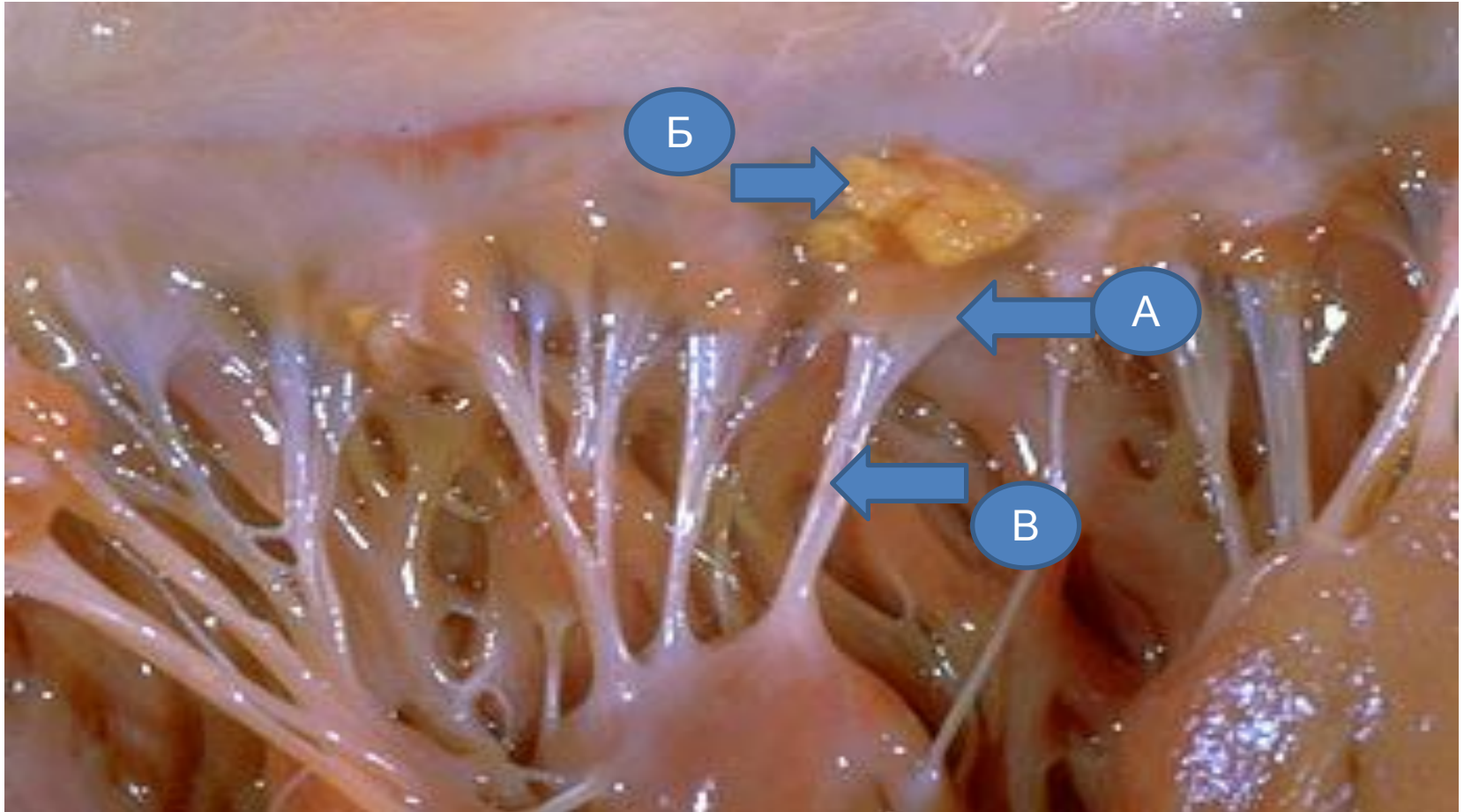
- A. Dilatation of right ventricle
- Б. Aortic stenosis
- В. Dilatation of left atrium
- Г. Stenosis of mitral valve
- Д. Left ventricular hypertrophy

Nonbacterial thrombotic endocarditis



- A. Flap of aortic valve
- Б. Vegetations
- B. Mitral valve

Nonbacterial thrombotic endocarditis

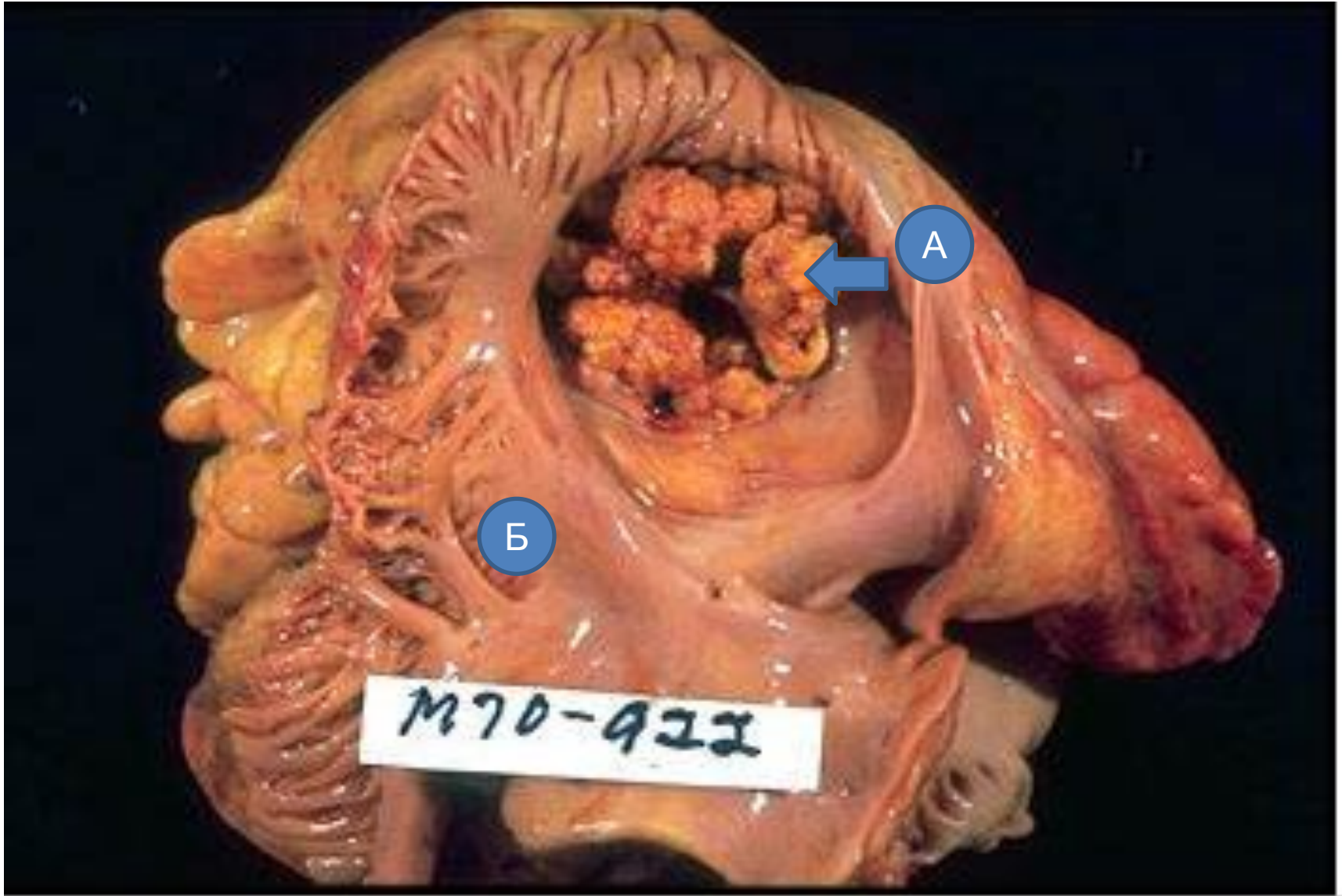


A. Sheet of the valve

Б. Vegetations

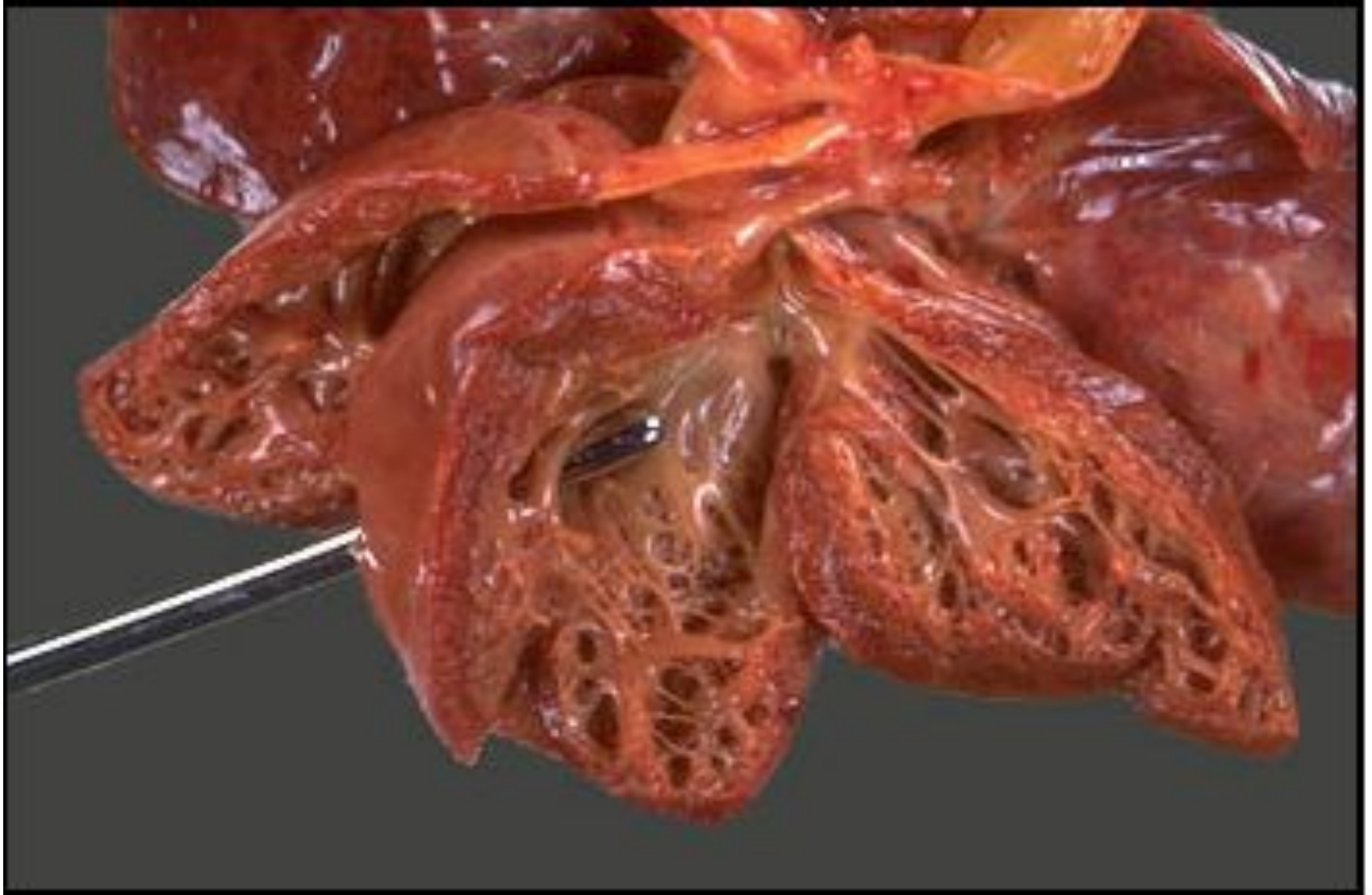
B. Chords

Infectious endocarditis

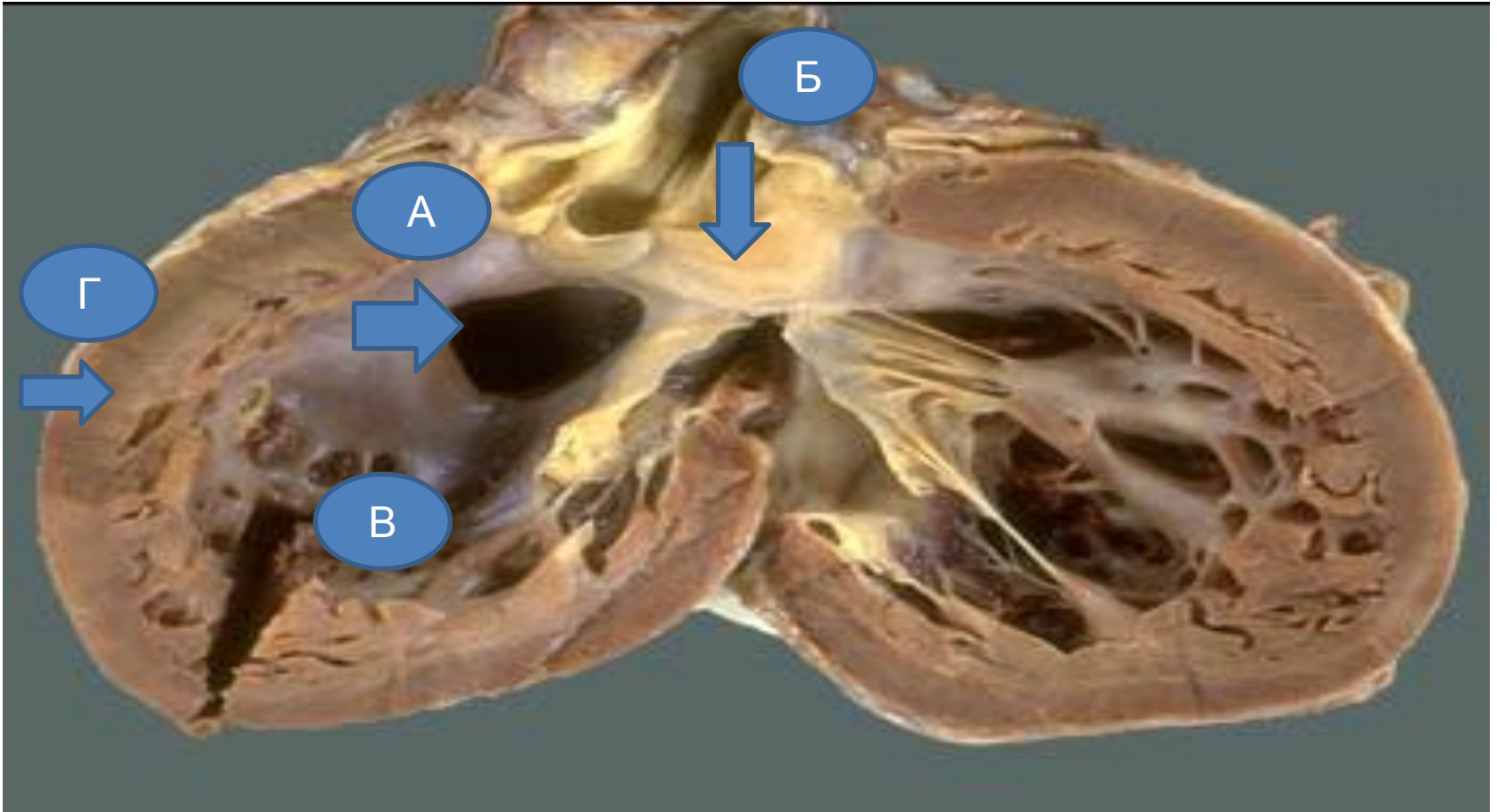


- A. VEGETATION
- Б. The right atrium

Defect of intraventricular septa

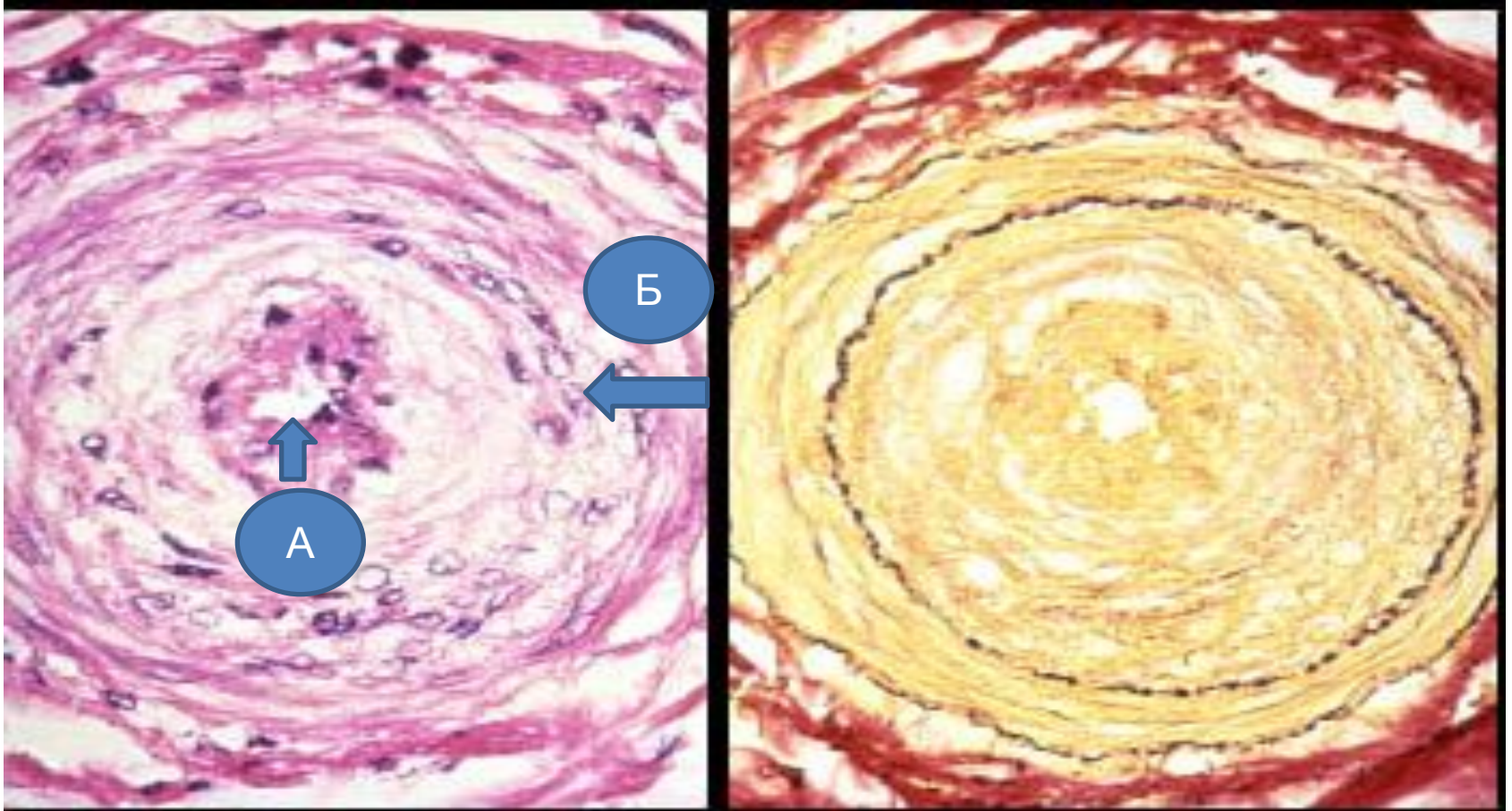


Defect of intraventricular septa



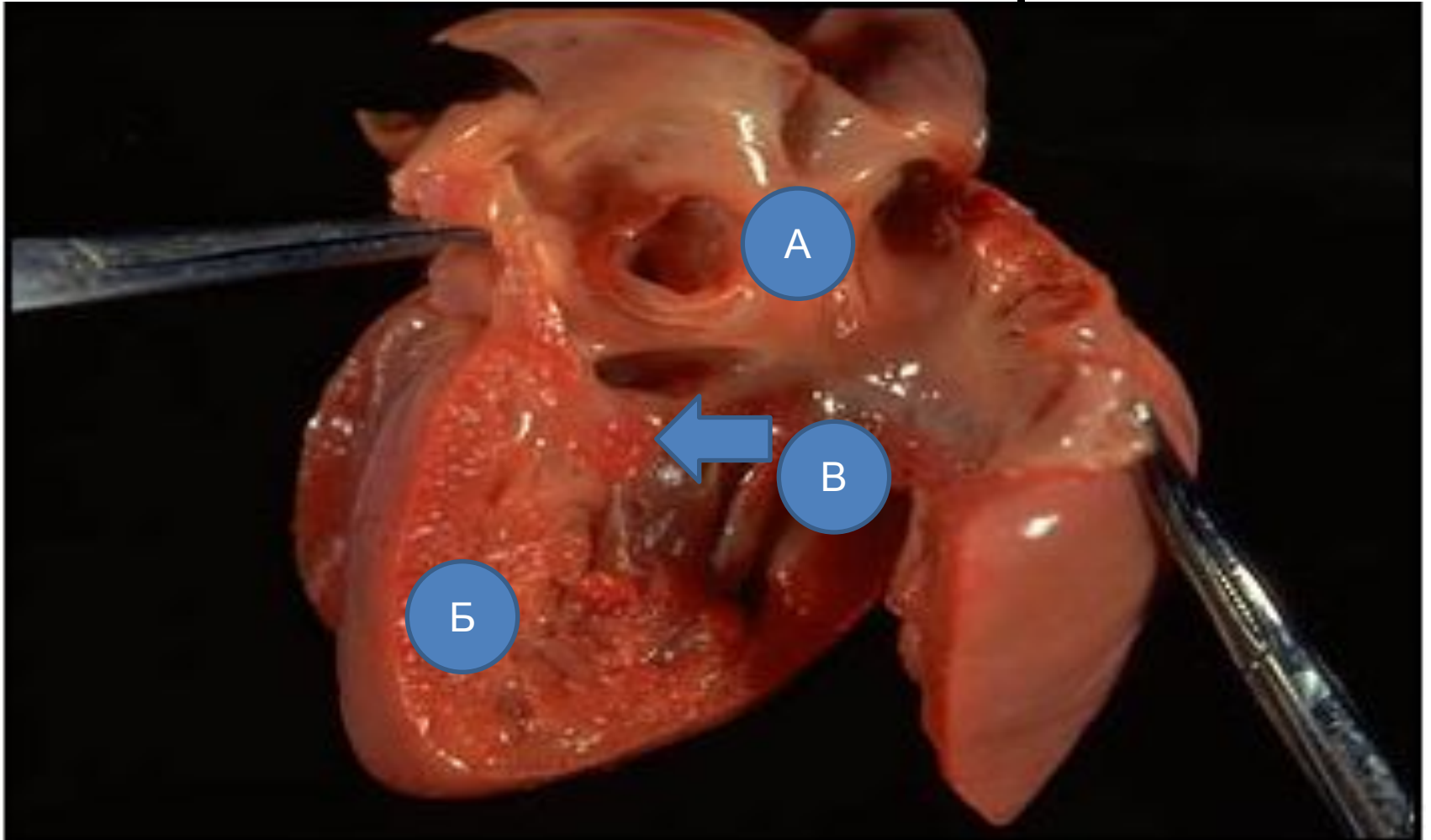
- A. Defect of intraventricular septa
- Б. Aortic valve
- В. Dilatation of left ventricular
- Г. Thickening of the wall of the left ventricle

Changed the vessels during congenital heart disease



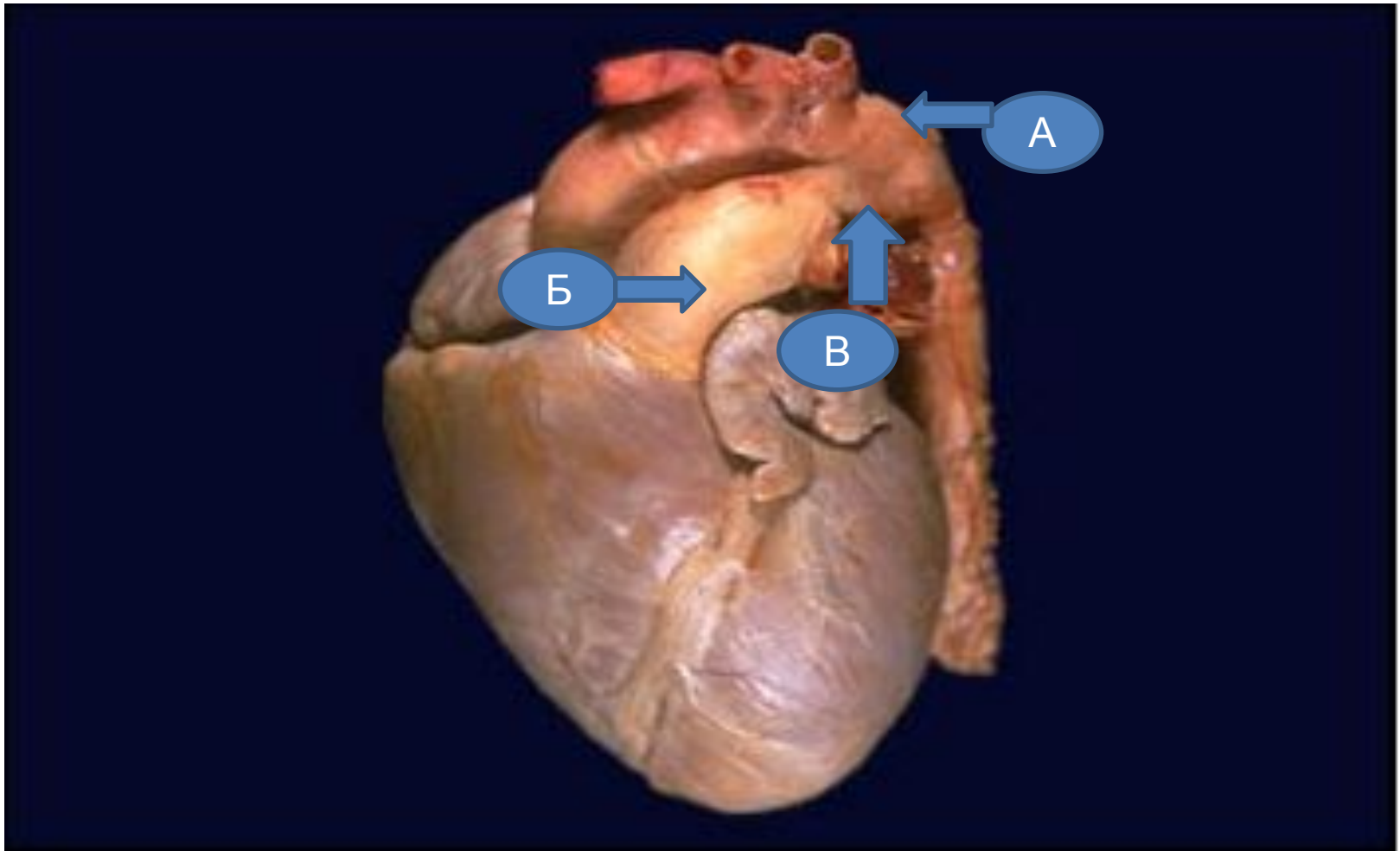
- A. Stenotic foramen
- B. Hypertrophy of smooth muscle cells

Defect of intraatrial septa



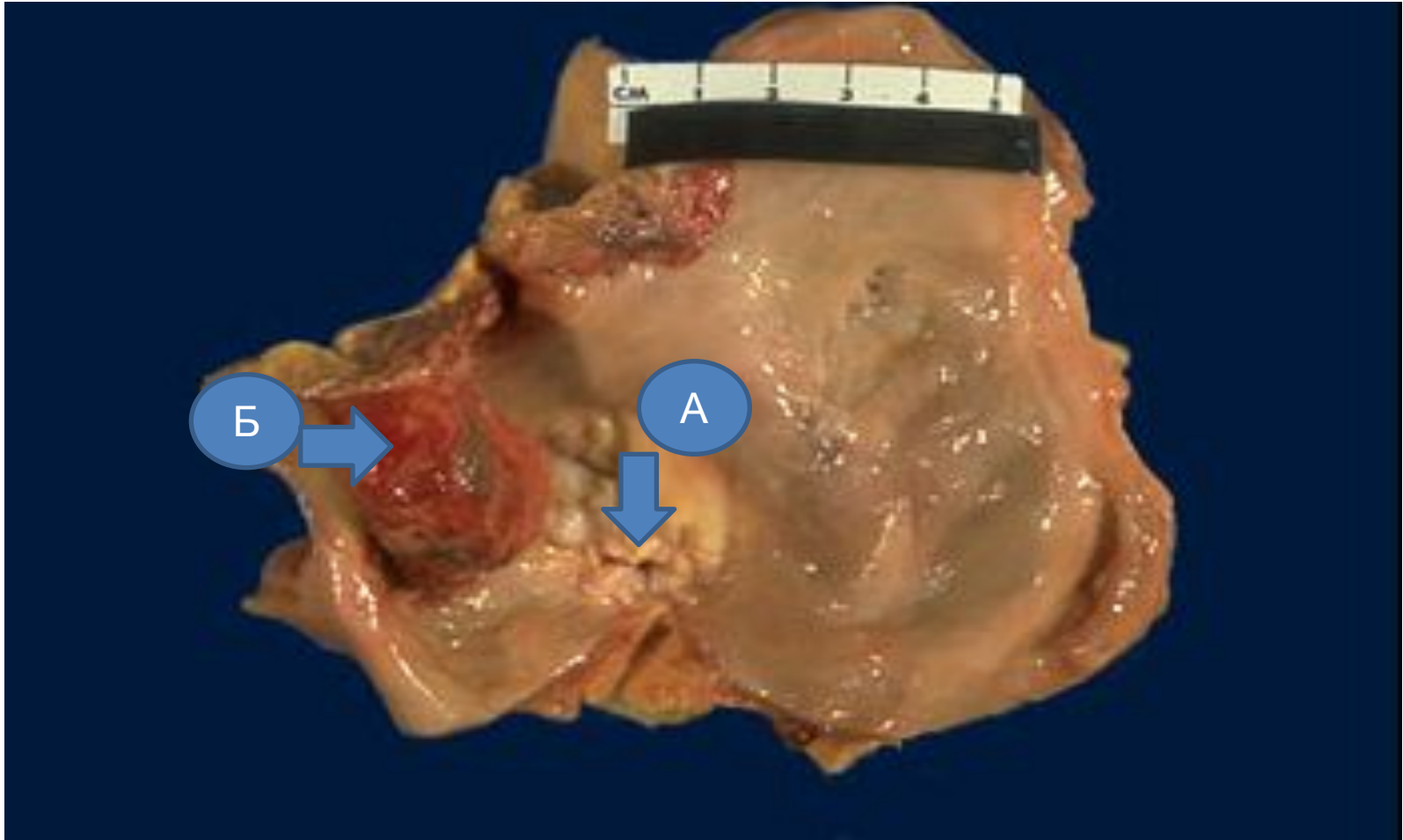
- 1. The right atrium
- 2. The right ventricle
- 3. Tricuspidal valve

Exposed arterial duct



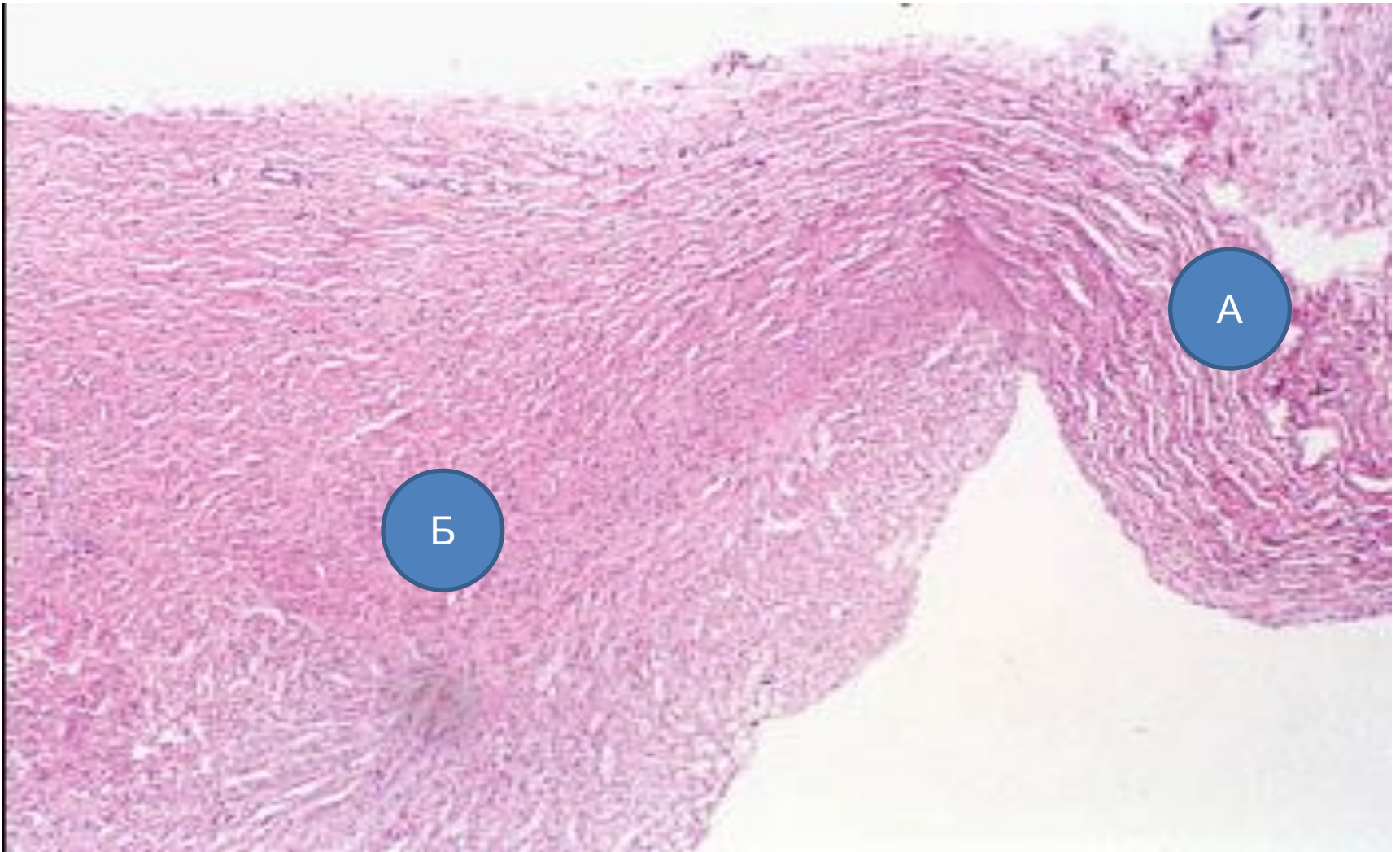
- A. aorta
- Б. pulmonary trunk
- B. arterial duct

The mitral valve during rheumatism



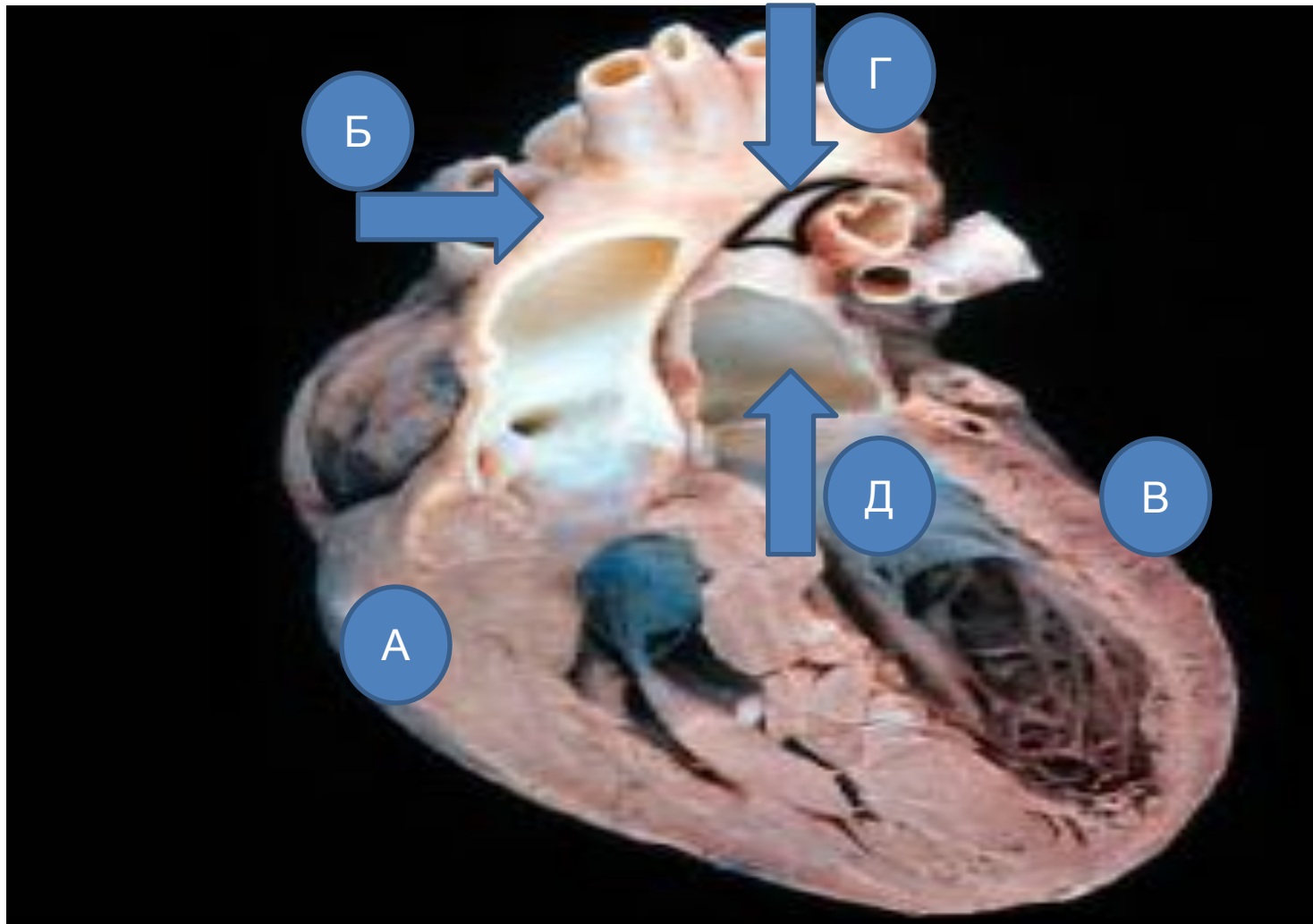
- A. stenotic mitral foramen
- Б. the atrial thrombus

Coarctation of aorta



- A. unmodified aorta
- Б. coarctation

Transposition of vessels



- А. right ventricle Б. aorta В. left ventricle
- Г. arterial duct Д. pulmonary artery