

## THORAX 4

### You are supposed to learn about:

1. Development of the heart and great vessels, selected anomalies and malformations (attend the lecture, since the MCQ will base on it!); development of pericardium
2. Fetal circulation and its derivatives
3. Pericardium: anatomy, parts, pericardial cavity, pericardial sinuses, arterial supply, venous drainage, innervation
4. Heart: general appearance, surfaces, borders, apex, sulci, surface projections
5. The cardiac cycle and heart sounds; auscultatory areas, palpation areas
6. Structure of cardiac wall, fibrous skeleton of the heart
7. Chambers of the heart: morphology, typical features; interatrial, interventricular and atrioventricular septa
8. Cardiac valves: structure, function, typical features
9. Coronary arteries: anatomy, origin, course, branches, areas of supply, variations, coronary collateral circulation
10. Cardiac veins: anatomy, course, drainage
11. Lymphatic drainage of the heart
12. Stimulating and conducting system of the heart: structures, topography and course, blood supply, function
13. Innervation of the heart: anatomy, topography and function of cardiac plexuses, role of sympathetic and parasympathetic systems

Always read the relevant clinical blue boxes to have an idea about clinical significance of structures you learn about.

### In the dissection room, you are supposed to recognize:

1. Pericardium: parietal pericardium, epicardium, fibrous pericardium, serous pericardium, pericardial sinuses
2. Surfaces and borders of the heart, apex of the heart, anterior interventricular sulcus, posterior interventricular sulcus, coronary sulcus, subepicardial adipose tissue
3. Right atrium: walls, right auricle, terminal sulcus, interatrial sulcus, orifices of caval veins, opening of coronary sinus, crista terminalis, pectinate muscles, valves of the coronary sinus and inferior vena cava, triangle of Koch, interatrial septum, atrioventricular septum, fossa ovalis (limbus, valve of foramen ovale), position of sinuatrial and atrioventricular nodes
4. Left atrium: walls, left auricle, openings of pulmonary veins, interatrial septum (semilunar depression, valve of foramen ovale)
5. Right ventricle: tricuspid valve, chordae tendineae, papillary muscles, supraventricular crest, septomarginal trabecula, trabeculae carneae, inflow tract, outflow tract, pulmonary valve (semilunar leaflets, pulmonary sinuses)
6. Left ventricle: mitral valve, chordae tendinae, papillary muscles, inflow tract, outflow tract, vestibule of aortic valve, aortic valve (semilunar leaflets, aortic sinuses), mitral-to-aortic fibrous continuity

7. Septum of the heart: interatrial septum, interventricular septum (muscular, membranous), atrioventricular septum
8. Fibrous skeleton of the heart: fibrous rings, fibrous trigones, membranous septum
9. Coronary arteries and their branches
10. Coronary sinus, cardiac veins, openings of smallest cardiac veins (best visible in the left atrium).
11. Localization of sinoatrial node, atrioventricular node, atrioventricular bundle and atrioventricular bundle branches
12. Superficial and deep cardiac plexuses

**Note:** Moore's Clinically Oriented Anatomy suggests an existence of the "membranous interatrial septum". Do not use this term, because it is denied by cardiac morphologists. Instead, there is the atrioventricular septum separating the right atrium from the left ventricle of the heart. It is an important feature because of diagnostic and clinical reasons. It makes it obligatory to know about. You will hear about it in the lecture.