1. Congenital ostial coronary artery atresia/hypoplasia should be a part of the differential diagnosis particularly in young patients presenting with a totally occluded coronary artery and no cardiovascular risk factors.

2. Thrombolysis can be a good choice for treatment of STEMI if primary PCI has failed.

3. Patients with suspicion of anomalous coronary arteries should perform CT angiography (CTA) to confirm originated sites, anatomic route and whether complicated with other congenital malformation.

Key words: myocardial infarction, coronary anomaly

8. SWITCHING THE LITTLE KIDS LIVES ON

Authors. <u>Gratiana-Andreea Lates</u>, Roberta Angheleanu, Anamaria-Romina Jugariu, Tímea Katona, Razvan-Gabriel Budeanu

Scientific advisers: Valentin-Ionut Stroe, MD, PhD; Horatiu Suciu, MD, PhD, Professor University of Medicine and Pharmacy of Targu Mures

Background. Cormatrix is an innovation in bioengineering, introduced in the medical world in 2013. The material is based on the extracellular matrix derived from the porcine intestine submucosa, allowing for tissue restructure and growth in the "site" where it is used. The composition consists of collagen, glycosaminoglycans, glycoproteins, proteoglycans and growth factors VEGF, FGF. The superior characteristics are given by acellularity, resistance to infection, anti-inflammatory effect and immunomodulator, the most important element being the reactivity depending on the impulse from the tissue where it is involved.

Case report. At the Institute of Cardiovascular and Transplant Diseases in Targu Mures, Cormatrix has been in used since 2013 and has been useful as a biocompatible tissue in arterial switch procedures of transposition of great vessels. A 12 days old patient diagnosed with transposition of great vessels was received by Institute of Cardiovasculare and Transplant Diseases from Targu Mures for a arterial switch surgery. The surgery implies total cardiopulmonary by-pass and at 26 Celsius degrees in the operating theater the great vessels are cut from their emerging. The coronary arteries are excised from the future pulmonary artery and reimplanted in neo-aortic wall; the resulting parietal defect after the coronary arteries excision is repaired with a Cormatrix patch plasty. Literature showed that in 30% of cases where pericardial patch was used it led to a pulmonary supravalvular stenosis. The post-surgery echographics at 3 months, 6 months and 1 years where Cormatrix was used showed no change in circulatory flow in the pulmonary cormatrix patch segment.

Conclusions. In conclusion Cormatrix patch seems to have better results in reconstruction of the pulmonary artery wall defects in transposition of great vessels surgery because it has a high level of biocompatibility and a better reintegration in the vessel tissues .

Key words: cormatrix, bioengineering

9. SLEEP APNEA SYNDROME AS A CAUSE OF SEVERE PULMONARY HYPERTENSION

Author: Vlad Filimon

Scientific advisers: Filimon Silvia, David A., Sircu V., Institute of Cardiology, Institute of Phtisiopneumology *Chiril Draganiuc*

Nicolae Testemitanu State University of Medicine and Pharmacy of the Republic of Moldova

Background. Sleep apnea is a disorder characterized by pauses in breathing or periods of shallow breathing during sleep. There are three forms of sleep apnea: obstructive (OSA), central