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. **Gratiana-Andreea Lates, 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

(CSA), and a combination of the two called mixed. OSA affects 1 to 6% of adults and 2% of children, but CSA affects less than 1% of people.

Case report. Patient X, 58 years old, of female, was admitted at the Institute of Cardiology with mixed (inspiratory and expiratory) dyspnea at minimal effort, ankle swelling, general weakness, dizziness. The patient suffers from arterial hypertension during 14-year with maximum levels 180/90 mmHg, working blood pressure being - 130/80 mmHg. At home regular treatment with tab. Bisoprolol 2.5 mg in the morning, tab. Aspirin 75 mg/day, tab. Losartan 50 mg in the evening, tab. Torasemidi 10 mg in the morning, over a day. The general condition worsened the last month when signs of congestive heart failure progressed. The echocardiographical examination revealed severe cardiomegaly (LA - 50 mm, LV - 60 mm, RA - 51 mm, RV - 40 mm), preserved left ventricular function (EF - 58%), reduced right ventricular function (TAPSE - 16 mm), severe pulmonary hypertension (PASP - 140 mmHg). To determine the cause of the pulmonary hypertension, a number of investigations were performed. Pulmonary artery angiography by computed tomography revealed pulmonary artery enlargement (40 mm) and dilated intrapulmonary arteries, but no data on thrombosis. Spirography has revealed severe changes in the function of external respiratory organs, being restrictive. Laboratory analyzes excluded the systemic sclerodermia (ANA-negative, Anti Scl-70 antibodies – 1.5 U/ml, Anti Centromer B antibodies – 0.3 U/ml) and normal values of D-dimers (0.24 ng/ml) excluded the presence of venous thrombosis. To exclude the presence of Sleep Apnea Syndrome, cardio-respiratory polygraphy was performed. A severe form of Sleep Apnea-Hypopnea Syndrome was recorded, with the Apnea-Hypopnea Index (AHI) – 84.3/hour, with severe intermittent and continue nocturnal hypoxemia in close correlation with respiratory events, having a Desaturation Index (DI) – 82 6/hour. Average SaO2 – 69.6%, SaO2 minimum – 42%, SaO2 <90% = 07 hours 50 min 48 sec.

Conclusions. After 10 days of complex treatment with diuretics, direct and indirect anticoagulants, nitrates, angiotensin II receptor blockers, beta-adrenoblockers, continuous oxygen therapy, and CPAP + Oxygen therapy, the general condition improved: the mixed dyspnoea at minimal effort was reduced, general weakness , dizziness disappeared as well as the ankle swelling, and pulmonary artery systolic pressure decreased from 140 mmHg to 100 mmHg.

Key words: sleep apnea-hypopnea syndrome, pulmonary hypertension

DEPARTMENT OF SURGERY no.1 *NICOLAE ANESTIADI*

10. CHOLEDOCHOLITHIASIS – DIAGNOSTIC AND TREATMENT OPPORTUNITIES

Author: **Omar Masri**
Scientific adviser: Streltov Liuba, MD, PhD, University assistant, Department of Surgery no.1 *Nicolae Anestiadi*
Nicolae Testemitanu State University of Medicine and Pharmacy of the Republic of Moldova

Background. Choledocolithiasis is a late complication in the evolution of biliary lithiasis. More frequently, the main bile duct approach is performed by new miniinvasive methods.

Case report. A 38 y/o female was diagnosed and treated in SOROKA Medical Center Beersheba in 2016**.** The patient was afebrile, haemodynamically stable, yet presented jaundice. The abdomen was soft, mildly tender at palpation, with a negative Murphy's sign. Blood tests identified: WBC 4.6 x 109/L, AST 258 IU/L, ALT 352 IU/L, billirubin 77 umol/L, alkaline phosphatase 258 IU/L. The ultrasound investigation detected a dilated CBD (14 mm) containing two stones. MRCP confirms two ductal stones of 8 and 10 mm, and a dilated duct. ERCP identified two stones of 8 and 10 mm that couldn't be removed, so a stent was placed and a