

24. MASSIVE HEMOPTYSIS IN MITRAL STENOSIS

Cumpanici Ana, Domenti Marina, Dogot Marta

Academic advisers: **Caproș Natalia**, M.D., Ph.D., Associate Professor, **Danilov Aurel**, M.D., Ph.D., Professor, State Medical and Pharmaceutical University "Nicolae Testemițanu", Chisinau, Republic of Moldova

Introduction: Massive hemoptysis is an uncommon but life-threatening emergency. The loss of at least 600 ml of blood within a 48-hour period has been associated with a high mortality rate. Although most commonly hemoptysis caused by valvulopathies is not massive enough to be life threatening, have been reported cases of asphyxia after pulmonary hemorrhage in patients with mitral stenosis. Hemoptysis and occurrence of pulmonary edema associated with end stage and severe mitral stenosis would be an indication for early surgery.

Aim of the study: To assess the clinical, laboratory aspects and the presentation of a clinical case with massive hemoptysis and mitral stenosis occurred at mature age.

Material and methods: The patient was hospitalized, examined, evaluated in Hospital "Saint Trinity", Chisinau.

Results: Patient aged 45 years was hospitalized in Emergency Department due to pulmonary hemorrhage (>2l/24 hours) and hemorrhagic shock. From anamnesis, the patient is known with rheumatic heart defect – mitral stenosis at the age of 25 years. It is of interest that massive hemoptysis in this patient occurred as a first manifestation of mitral stenosis. He administered anticoagulation therapy – Warfarin. Physical examination on admission revealed a normal weight patient in critical condition. Relative limits were deflected: left heart border – by 4 cm and right – by 2 cm, arrhythmic heart sounds, atrial fibrillation, diastolic murmur, distended jugular, peripheral edema at the calves, lower liver edge - 4 cm below the right costal border.

Echocardiographic examination revealed the patient's hardened, calcified aorta walls, indurated annulus and aortic valves, calcified, with formation of the moderate regurgitation (II degree), mitral annulus calcification, mitral valves endured pronounced calcified stenosis formation, transmitral pressure gradient – 36 mmHg., mitral orifice area – 1,5 cm², considerable dilatation of the left atrium, right atrium, moderate dilatation of the right ventricle, asymmetrical hypertrophy of the left ventricular myocardium, ejection fraction – 60%. Tricuspid valve insufficiency – IIIrd gr. Pulmonary artery valve insufficiency – IInd gr. Severe pulmonary hypertension, pulmonary artery pressure – 68 mmHg. Initial treatment consisted from antishock therapy (ice bag, airway maintenance, oxygen 2-4 l/min, permanent venous access, fluid resuscitation, hemostasis and hemodynamic correction), β -blockers and digitalis administration. Patient's general condition improved by stopping hemoptysis and reducing dyspnea, but pulmonary bleeding complications required a special intervention – the reference to cardiac surgeon.

Conclusion: Our patient's history and clinical course illustrate that severe hemoptysis may complicate moderate degrees of mitral stenosis. The patient had the high thromboembolic risk necessitated anticoagulation therapy. Mitral valve operation would appear to be beneficial in cessation of hemoptysis.

Keywords: Massive hemoptysis, mitral stenosis

25. PREVALENCE AND SHORT-TERM PROGNOSTIC IMPLICATIONS OF ADMISSION HYPERGLYCEMIA IN NON-DIABETIC ACUTE MYOCARDIAL INFARCTION PATIENTS

Bivol Elena, M.D., Department of Endocrinology, "Sfinta Treime" Municipal Hospital, Chisinau, Republic of Moldova

Academic adviser: **Grib Liviu**, M.D., Ph.D., Professor, State Medical and Pharmaceutical University "Nicolae Testemițanu", Chisinau, Republic of Moldova

Introduction: In patients with acute myocardial infarction, elevation of plasma glucose levels is associated with worse outcomes.

Purpose and Objectives: The aim of this study was to evaluate the prevalence of newly

hyperglycemia and the association between admission hyperglycemia and in-hospital mortality in patients with acute myocardial infarction (AMI).

Materials and Methods: Retrospective observational study included 125 consecutive patients (≤ 70 yo) with AMI hospitalized at "Sfinta Treime" Municipal Hospital, Chisinau, in period 1.01.2012-31.12.2012. Patients with known diabetes mellitus ($n=25$) or non-diabetic with fasting hyperglycemia ($n=17$) were excluded, while those with previous myocardial infarction or stroke were enrolled.

The study sample was divided into normoglycemic patients (NDN; $n=50$; fasting glucose < 6.1 mmol/l and 2-h post-load glucose < 7.8 mmol/l) and those with admission hyperglycemia (NDH, $n=33$), without previous history of diabetes (admission glucose ≥ 7.8 mmol/l).

Data were analyzed in MS Excel (2010). Results are presented as means and SD. Pearson correlation coefficient (r) was determined for each variable and $p < 0.05$ was considered statistically significant.

Results: The results of the present investigation confirm that, even among non-diabetic patients, the prevalence of elevated glucose levels upon admission for AMI is high ($n=33$; 33%), the prevalence was higher in men (21 vs. 12). Compared to normoglycemic, NDH patients were younger (53.64yo vs. 57.30). As expected, mortality were significant lower in NDN ($n=2$; 4% vs. $n=10$; 30%). Mortality was higher in males (7 vs. 3 in NDH; 2 vs. 0 in NDN). In NDH group death occurred predominantly in younger group (9 patients ≤ 60 yo and 1 person > 60 yo, compared to 1:1 in NDN). In both groups, admission glucose levels were higher in non-survivors (5.68 ± 1.24 vs. 5.64 ± 0.92 in NDN and 10.85 ± 2.44 vs. 10.13 ± 2.34 in NDH; $p < 0.001$). A strong uphill correlation was observed between admission glucose and mortality (r -coefficient 0.53). NDH had longer hospital stay (456.00 ± 30.99 h vs. 426.00 ± 21.08 ; $p < 0.001$). Death occurred earlier in NDH (37.66 ± 15.19 vs. 72.70 h, $p < 0.05$).

It suggests that the presence of hyperglycemia in subjects who present with AMI offers a survival disadvantage.

Conclusions: Hyperglycemia on admission is an independent predictor of poor in-hospital outcome and mortality in AMI and could be used in the stratification of risk in these patients. The impact of hyperglycemia as a risk factor in AMI is more pronounced in younger patients (≤ 60 yo) compared to those older than 60yo.

Keywords: Acute myocardial infarction, admission hyperglycemia, mortality

26. CASE REPORT: DILATED CARDIOMYOPATHY – A SUCCESSFUL RESPONSE TO TREATMENT

Danci Aliona, Josan Doina

Academic adviser: **Grib Liviu**, M.D., Ph.D., Professor, State Medical and Pharmaceutical University "Nicolae Testemițanu", Chișinău, Republic of Moldova

Introduction: Dilated cardiomyopathy (DCM) is a common cause of congestive cardiac failure all over the world. The incidence is 5-8 cases per 100 000 population per year, men suffer 2-3 times more often than women, mean age of patients - 30 to 45 years, rarely it is met in elderly patients, as it was in our case. Regardless of the type of DCM, many years they are asymptomatic and first manifestation usually being an advanced state with features of congestive cardiac failure III-IV (NYHA) or with complications like arrhythmia and sudden cardiac death and have a high mortality rate of 15.0-50.0% at 5 years. Treatment of DCM is aimed to reduce the congestive symptoms and the number of episodes of decompensations and to improve the quality of life.

Materials and methods: We present a literary reference to cardiomyopathy and a clinical case of DCM. Demonstration of a case is of great interest to clinicians in terms of the relevance of the disease.

Results: This is a report of successful management of a patient with severe DCM, who was admitted at the first time with congestive heart failure IV (NYHA), severe multiple valvular insufficiencies, which after 3 weeks of conservative treatment was compensated till CHF III (NYHA). After undergoing a successful heart surgery with aortic and mitral valve prostheses has returned to normal life.

Conclusions: The outlook for patients with cardiac failure has improved substantially in the last 15 years. This is largely due to the application of the results of multicentre clinical trials of new and older