Section 14. Medical Sciences.

A.KANYBEKOV

Associate Professor of Department of General surgery of Kazakh National Medical University named after S.D. Asfendiarov

V. INDERSHIYEV, D. ABDULLINA,

A. ALDABERGEN, D. ABDAZIMOVA

Students of General Medicine Faculty of Kazakh National Medical University named after S.D. Asfendiarov Almaty, Republic of Kazakhstan

INVASED STAB WOUND OF THORAX COMPLICATED WITH PURULENT PERICARDITIS

Pericarditis, or inflammation of pericardium, is known from the very beginning of our era.

Surgeons have to work with patients who have acute pericarditis developed after various heart and pericarditis injuries on daily basis. During The Great Patriotic War frequency of purulent pericarditis caused by gunshot wounds was about 4-10%.

The main reasons stimulating development of pericarditis after injuring are primary infection, direct heart and pericarditis damages (87,3%), delayed access to doctor after closed injury (71,4%). Frequency of development of pericarditis caused by closed chest injure does not exceed 0,5%. General mortality makes up 23,6% [1,2,3,4].

Acute pericardial effusion and purulent pericarditis are rare and nowadays there is no opinion about optimal treatment strategies for this category of patients. Adherents of early stages of pericardiotomy having opinion that this manual is necessary at purulent pleurisy of any etiology in spite of great opportunities of modern antibacterial therapy. The early access to doctor is particularly important for stab wound treatment. We want to show the instance

of a chest stab wound with total pneuthorax complicated with purulent pleurisy.

Patient K., 38 years old. On 18.12.2010 he was delivered by ambulance with complains to severe pains in the left half of thorax, the heavy breathing, dyspnea, weakness, fever. As stated by patient three days ago his son being drunk stabbed him with knife in the left half of the chest. The injured didn`t ask for help. He called ambulance when the symptoms appeared. Condition of the patient was at moderate severity, skin was pale. The left half of a thorax lagged behind at breathing in comparison to the right one. There was tympany while percussion. Auscultating breath sounds were unheard. There wasn't revealed any cardiac pathology. Pulse 92 beats per minute. ABP 100/70. There was a wound of 2,0 – 0,5 cm located on the left half of a thorax in 4 – 5th intercostals space on average clavicular line with smooth edges, insignificant purulent separated, and hyperemia around skin integuments. Debridement was carried out, the aseptic bandage was applied. The X-ray examination of the chest was made. Left-side pneumothorax on the radiograph within liquid in a pleural cavity. (Figure 1)

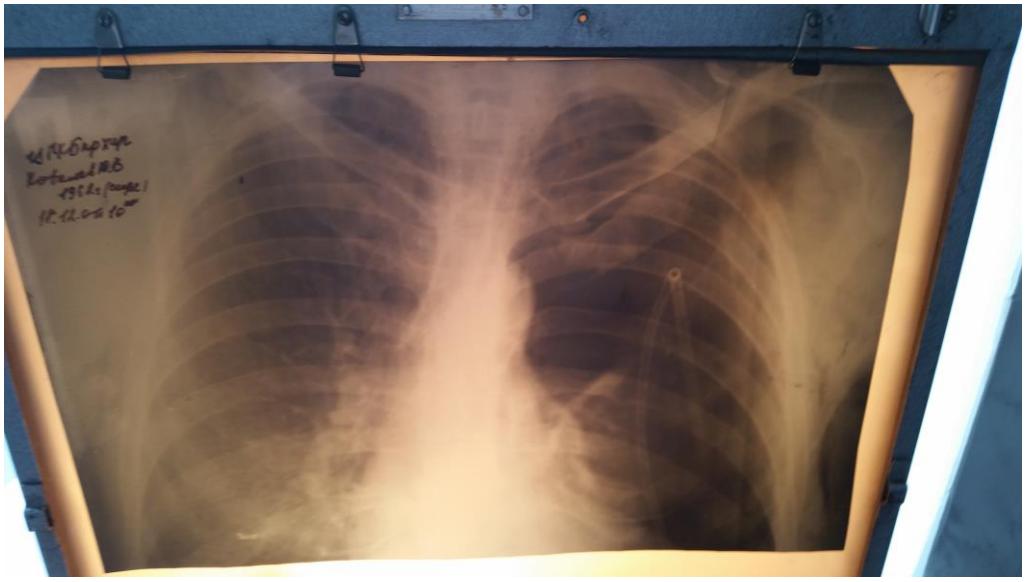

Figure 1.

Taking into account the existing left side pneumothorax second intercostal space along midclavicular line the Bulau drainage was set, one stage about 2 liter of air was evacuated. After three days with a repeated radiography there

was no pneumothorax the lung entirely opened, the drainage has removed. The patient continued taking antibacterial, antiphlogistic, symptomatic desintoxication therapy. The wound in the area of the chest wall became clear from purulent plaque, the hyperemia of skin disappeared, the granulation tissue began to occur. Patient's condition much improved. There are not particular complaints except weakness, minor pain in left side of chest , however subfebrile temperature appeared, so in 28.12.10 the radiography of chest was made. The scale of heart much increased in size on radiograph; almost entirely take lower half of chest (Figure 2).

Figure 2.

Electrocardiogram was made to the patient. It revealed konkordanty raising of a ST-segment, down of a voltage. The Patient was examined by cardiosurgeon. The tamponade of heart was diagnosed. Patient had been taken to surgery on emergency indication. General anesthesia was made to the patient. Extra pleural

pericardiotomy was conducted: it had been made in the upper part of the epigastrium by vertical section in the midline part of an abdomen. Xiphoid process had been respected. Fibers of the diaphragm was layered blunt, accessed pericardial leaf which was closed between two superimposed on the pericardium seams-DSLRs. By this, had been made the window with a diameter of 5 centimeters and there had been revealed the purulent pericarditis, and removed a liter of pus pump. The cavity of the pericardium had been careful sanitated. At revision - the pericardium's integrity was not disrupted. On the pericardium had been made the rare stitches with left for drainage.

Some days there were ligation of the patient and stopping discharge from the wound, the drainage removed. After 8 days the sutures had been removed. The temperature of the patient normalized. On the control radiograph of organs of a thoracic cavity pathology was absent. 10 days after pericardiotomy the Patient had been discharged and re-examined after 6 months, he has no complaints.

Conclusions: The case study: a penetrating chest stab wound with a total left-sided pneumothorax complicated by supportive pericarditis and cardiac surgeon's rational tactics had provided favorable outcome.

Literature:

1. Абакумов М. М. с соавт. Профилактика и лечение посттравматического перикардита. // Хирургия. – 2010. - №4. – С. 16-20.

2. Ермолов А. С. с соавт. Диагностика и лечение ранений сердца и перикарда. // Хирургия. – 2001. - №1. – С. 18-21.

3. Самохвалов И. М. с соавт. Диагностика и хирургическая тактика при ранениях сердца и перикарда. // Вестник хирургии. – 2009 г. – С. 102-107.

4. Шевченко Ю. Л. С соавт. Перикардит. Диагностика, лечение и профилактика. // С. П. Наука. – 1999 г. – 192 с.