

***NATIONAL MILITARY MEDICAL CLINICAL CENTRE<sup>1</sup>,  
NATIONAL UNIVERSITY OF TARAS SHEVCHENKO<sup>2</sup>***

***OUR SUCCESSFUL EXPERIENCE IN THE TREATMENT OF  
THE CLINICAL CASE WITH THE GUNSHOT WOUND OF THE  
POPLITEAL AREA***



***Vladimir Rogovsky<sup>1</sup> ,MD; Yuliia Nahaliuk<sup>1</sup> MD;  
Mikola Shepetov<sup>1</sup> ,MD; Yuriy Sivash<sup>1</sup> ,MD;  
Victor Chernyak<sup>2</sup>, PhD***

***KIEV, UKRAINE - 2022***

# ***INTRODUCTION***

Gunshot wounds (GSW) of the main vessels remain relevant and sophisticated sphere of vascular surgery both, in therapeutic and organizational way. The frequency of injuries of the femoral-popliteal area is about 76%. Literature data show that the frequency of amputations when the popliteal artery is damaged reaches nearly 90%.



# ***DIAGNOSIS***



***Gunshot bullet penetrating wound of soft tissues of the left popliteal area (08.08.21.) with damage to the popliteal artery and vein, posterior tibial nerve***

# ***TREATMENT***

## ***LEVEL 1***

08.08.22. - First aid was provided at the scene with *a tourniquet* was applied to the hip.

## ***LEVEL 2***

08.08.22. - was evacuated to the military hospital in Khurahovo, where were performed a *surgical treatment of the wounds, prothesis of the popliteal artery with PTFE, ligation of the popliteal vein, fasciotomy.*



# ***TREATMENT***

## ***LEVEL 3***

10.08.21. - evacuated to the military hospital in Kharkov, where were performed:  
*Revision of the vascular bundle of the left leg, repeated surgery, removal of the long tibialis muscle, partial resection of a deep portion of the soleus muscle of the left leg.*

12.08.22. - *Repeated surgical treatment of the wounds, partial resection of necrotic muscles of the left leg.*

14.08.22. - *Repeated surgical treatment of the wounds, removal of the anterior tibialis muscle, partial resection of necrotic muscles of the left leg.*

# ***TREATMENT***

---

## ***LEVEL 4***

16.08.22. - evacuated to the National military medical clinical centre, Kiev, where in the period 16-30.08.22., were performed *Repeated surgical treatment of the wounds, installation of VAC-system on the wounds of the left leg.*

31.08.22. - *Wound revision, refurbishment, secondary suturing of the wounds.*



# ***TREATMENT***



**Condition of the wounds during surgical treatment**



# RESULTS



After treatment



## ***CONCLUSIONS***

- ✓ According to world statistics, modern wars differ in significantly higher rates of major vessels' gunshot wounds than those in the wars of the late XX – early XXI centuries (World War II, Korea and Vietnam) (12 % vs. 2.8 – 8 %), and the proportion of vessel gunshot wounds of the lower extremities is constantly growing.
- ✓ All wounded at the 4th stage of medical evacuation are mostly severe due to complications after the previous stages of evacuation and due to a combination of injuries in other arterial basins, other organs, which required multiple surgeries, sometimes with loss of limb.
- ✓ The high level of surgical care at the 4th stage of medical evacuation in Ukraine, the completeness of modern medical support of mainly domestic manufacturers and the use of state-of-the-art technologies permit to avoid mortality in this category of wounded.



*THANK YOU FOR YOUR ATTENTION!!!*