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Quality of life according to EQ-5D-5L in patients with combat trauma of the lower extremity after transtibial amputation and reconstruction

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Objective. Comparative analysis of QOL according to EQ-5D-5L in patients with Gustilo-Anderson III gunshot wounds of the leg and foot who underwent transtibial amputation (TTA) and reconstruction. Material and methods. 82 patients aged 20–63 years (mean 37.9 ± 2.9 years) with gunshot injuries of the leg and foot (Gustilo-Anderson III) were enrolled. Two groups were formed: Group I (53 patients) — TTA, Group II (29 patients) — reconstructive treatment. The outcome was assessed using EQ-5D-5L no earlier 1 year after the end of treatment: Utility Index, EQ-VAS, Δ Utility Index, Δ VAS. Results. Patients of both groups were comparable in age, number of surgeries prior to hospitalization, and nature of combat trauma. The baseline Utility Index was significantly lower in patients in group I (0.065±0.29) compared to patients in group II (0.284 ± 0.35; p = 0.004), reflecting greater severity of injury. The final Utility Index was higher in group I (0.84 ± 0.06 vs 0.813 ± 0.13), although the difference did not reach statistical significance (p = 0.39). EQ-VAS did not differ in patients of both groups before and after treatment, and the increase in EQ-VAS (Δ VAS) was also not significantly differ. The increase of Utility Index (Δ Utility Index) was significantly greater in patients in group I (median 0.762 vs 0.457; Mann-Whitney p = 0.001; effect size = 0.81), indicating a more significant improvement in overall health in patients who underwent TTA. All domains had significantly greater improvement in the amputation group compared to reconstruction (p = 0.003–0.03). The proportion of patients with improvement was consistently higher in group I (more than 90 % of cases) compared to group II (less than 90 % of cases). Conclusion. Quality of life according to EQ-5D-5L in patients with severe gunshot injury of the leg and foot who underwent TTA and reconstruction does not differ according EQ-VAS before and after treatment. In contrast, the Utility Index in patients with TTA was significantly lower before treatment, had a significantly greater increase, and was higher after the end of treatment, although the final value was statistically insignificant.

Мета. Порівняльний аналіз якості життя за EQ-5D-5L у пацієнтів із вогнепальними ушкодженнями гомілки та стопи Gustilo-Anderson III після транстібіальної ампутації та реконструктивного лікування. Методи. Залучено 82 пацієнти віком 20–63 роки (37,9 ± 2,9) із вогнепальною травмою стопи та гомілки. Сформовано дві групи: I (53 пацієнти) — транстібіальна ампутація (ТТА), II (29 осіб) — реконструктивне лікування. Результат оцінювали за EQ-5D-5L не раніше року після закінчення лікування: Utility Index, EQ-VAS, Δ Utility Index, Δ VAS. Результати. Пацієнти обох груп були співставні за віком, кількістю операцій до госпіталізації, характером вогнепальної травми. Початковий Utility Index був значно нижчим у I групи 0,065 ± 0,29 порівняно з пацієнтами II (0,284 ± 0,35; p = 0,004), що відображало більшу тяжкість ушкоджень. Фінальний Utility Index був вищим у групі I (0,84 ± 0,06 проти 0,813 ± 0,13), хоча різниця не досягала статистичної значущості (p = 0,39). EQ-VAS не мав відмінностей у пацієнтів обох груп до та після лікування, приріст EQ-VAS (Δ VAS) також суттєво не відрізнявся. Приріст Utility Index (Δ Utility Index) значно більший у I групі (median 0,762 проти 0,457; Mann-Whitney p = 0,001; розмір ефекту = 0,81), що свідчить про суттєвіше покращення загального стану здоров'я в пацієнтів, яким провели ТТА. Усі домени мали більше покращення в групі ампутацій порівняно з реконструкцією (p = 0,003–0,03). Частка пацієнтів із покращенням (Δ < 0) була стабільно вищою в групі I (більше 90 % випадків) порівняно з групою II (< 90 % випадків). Висновок. Якість життя за EQ-5D-5L у осіб із тяжкою вогнепальною травмою гомілки та стопи, що перенесли ТТА та реконструкцію, не відрізняється за EQ-VAS до та після лікування. Натомість Utility Index у пацієнтів із ТТА був достовірно нижчий до лікування, мав достовірно більший приріст та вищий після закінчення лікування, хоча фінальне значення статистично незначиме. Ключові слова. Якість життя, EQ-5D-5L, бойова травма, нижня кінцівка, транстібіальна ампутація.

Key words. Quality of life, EQ-5D-5L, combat injury, lower extremity, transtibial amputation

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Introduction

The evolution of weapons and the tactics of their use in modern warfare have fundamentally changed the pattern and severity of combat-related and civilian gunshot injuries. The main trend is a reduction in mortality due to improved emergency care, accompanied by an increasing proportion of lower-extremity injuries, which now account for more than 80 % of all injuries [1, 2]. The pattern of combat-related lower-extremity trauma has also undergone major changes and is currently characterized by the predominance of blast and fragment-related mechanisms of injury, which in most cases result in substantial anatomical deficits [3]. Lower-extremity amputations (LEA) account for up to 85.6 % of all amputations [4], with most performed proximal to the ankle joint (transtibial amputations > 40 %, transfemoral amputations nearly 35 %).

Modern surgical technologies, antimicrobial therapy, and advanced anesthetic management make limb salvage possible in cases that would have required amputation 30–40 years ago. However, limb preservation cannot be regarded as a successful treatment outcome if the weight-bearing and kinematic function of the limb is not restored to a level sufficient for independent locomotion. Therefore, comparative studies evaluating the effectiveness of two fundamentally different treatment strategies, i. e. reconstruction and amputation, in patients with gunshot injuries of the lower extremity remain of considerable interest and clinical relevance [5].

One aspect of evaluating the effectiveness of treatment technologies is the use of health-related quality-of-life (HRQOL) assessment systems. The EQ-5D-5L is a simple and accessible health status assessment instrument that is widely used in various countries both for population health studies and clinical research [6]. An important characteristic of the EQ-5D-5L is its patient-centered nature, which, together with the availability of national value sets, makes it possible to substantially reduce the effects of bias. Unfortunately, Ukraine has not participated in the development of its own national value set; therefore, studies using the EQ-5D-5L should appropriately use the British value set [7].

The EQ-5D-5L has been used to assess the quality of life of military personnel with the consequences of severe gunshot injuries, including amputations [8]. A major advantage of this instrument is its assessment of components of everyday life (mobility, self-care, pain, etc.) across individual domains as well as through an overall index value. This makes it possible to analyze the contribution (weight) of individual components to the overall health status.

Objective: To perform a comparative analysis of quality of life using the EQ-5D-5L in patients with Gustilo-Anderson type III gunshot injuries of the leg and foot who underwent transtibial amputation or reconstructive treatment.

Materials and Methods

A total of 82 patients with gunshot injuries of the lower extremity and their sequelae who received inpatient treatment at the Department of Foot Pathology and Complex Prosthetics of the State Institution “Institute of Traumatology and Orthopedics of the National Academy of Medical Sciences of Ukraine” from March 2022 to January 2025 were included in the study. The study was approved by the Bioethics Committee (Protocol No. 8 dated 07.08.2026), and its conduct complied with the principles of the Declaration of Helsinki and the requirements of the local Bioethics Committee. Informed consent was obtained from all patients. The study design was a single-center, retrospective, comparative cohort study with parallel groups.

All patients were male, aged 20–63 years (37.9 ± 2.9 years); 79 were military personnel and 3 were civilian casualties. Inclusion criteria were gunshot fractures of the bones of the foot and leg, including their sequelae, corresponding to Gustilo–Anderson severity grades IIIA–IIIC; and a minimum of 30 days since injury. The following variables were assessed: age, type of gunshot injury, severity of the open fracture according to the Gustilo–Anderson classification, and the number of interventions performed before admission to the clinic. Patients underwent either transtibial amputation (TTA) or reconstructive treatment, and outcomes were assessed using the EQ-5D-5L no earlier than 1 year after completion of treatment. Thus, two groups were formed: Group I — transtibial amputation; Group II — limb salvage.

The use of the EQ-5D-5L by the authors of this study was registered with EuroQol Research for non-commercial purposes. The EQ-5D-5L assessment system included two recommended instruments: the visual analog scale (VAS) and five domains of physical and mental functioning: Mobility, Self-Care, Usual Activities, Pain/Discomfort, and Anxiety/Depression. Each domain has five response levels, coded from 1 to 5 and reflecting increasing severity (1 — no problems; 5 — extreme problems): no problems; slight problems; moderate problems; severe problems; extreme problems/unable to perform the activity.

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Calculation of the Utility Index (EQ-5D-5L Index Value)

The Utility Index was calculated using the UK EQ-5D-5L national value set, based on the hybrid model combining Time Trade-Off (TTO) and Discrete Choice Experiments (DCE), as described by D. Rowen et al. [7]. The hybrid approach combines TTO data, which provide anchoring to the utility scale of 0–1, with DCE data, which determine the relative preferences between domain levels. The model includes an intercept, 20 dummy variables (four for each EQ-5D-5L domain corresponding to levels 2–5), and estimated coefficients representing the utility decrement associated with a transition from level 1 to the corresponding level of each domain. The Utility Index for each patient was calculated using the following formula:

$$\text{Utility} = \text{Intercept} + \sum_{i=1}^{20} (\beta_i \cdot \text{dummy}_i),$$

where β_i are the model coefficients reported by D. Rowen et al., and the dummy variables take a value of 1 if the domain is at the corresponding level and 0 otherwise. For each patient, the Utility Index was determined before and after treatment, and ΔUtility was calculated as follows: ΔUtility = Utility after treatment − Utility before treatment.

Domain Analysis

For each EQ-5D-5L domain, Δ was calculated as the difference between the post-treatment and pre-treatment levels (post-treatment level − pre-treatment level). Between-group comparisons were performed using the Mann–Whitney test, together with descriptive statistics (median, quartiles, and frequencies of levels 1–5). In addition, an analysis of improvement was performed based on the categories $\Delta < 0$, $\Delta = 0$, and $\Delta > 0$. A negative Δ indicates an improvement in health status because lower EQ-5D-5L levels correspond to better health.

EQ VAS

Overall health status was assessed using the EQ VAS (0–100 mm), where 0 represents the worst imaginable health state and 100 the best imaginable health state. The EQ VAS was used as a one-dimensional subjective indicator allowing assessment of the patient's overall perceived health without domain-specific detail.

Comparison of VAS and Utility Index: Convergent Validity

The analysis was performed to assess the agreement between the one-dimensional indicator (VAS) and the multidimensional Utility Index using Spearman's correlation.

Statistical Analysis

All data were cleaned and structured. The dataset was checked for missing and anomalous values, formats were standardized, and derived variables (Utility Index, ΔVAS, and ΔUtility) were calculated.

For normally distributed data, mean values and standard deviations (mean ± SD) were reported; for non-normally distributed data, the median and interquartile range (median [IQR]) were reported. Normality was assessed using Q–Q plots and the Shapiro–Wilk test.

For within-group comparisons, the paired t-test was used for normally distributed continuous variables, whereas the Wilcoxon test was used for non-normally distributed variables. For between-group comparisons, Welch's two-sample t-test was used for normally distributed continuous variables, while the Mann–Whitney test was used for ordinal and non-normally distributed variables. The test used for ΔVAS and ΔUtility was selected according to the normality of the distributions in both groups.

Effect size for t-tests was calculated as Cohen's d; for the Mann–Whitney test, effect size was expressed as rank-biserial correlation based on the U statistic.

Statistical significance was set at $p < 0.05$. All calculations were performed in Microsoft Excel 2016 using the StatPlus add-in.

Results

EQ VAS

At baseline, subjective health status was similar in patients with amputated and preserved limbs (44.7 ± 12.9 vs. 49.2 ± 15.4; p = 0.18). After treatment, patients in both groups demonstrated significant improvement ($p < 0.001$ in each group), and final EQ VAS scores also did not differ between the groups (75.6 ± 9.6 vs. 75.0 ± 10.4; p = 0.90).

The change in EQ VAS (ΔVAS) did not differ significantly between the two groups (median 32.5 vs. 25.0; p = 0.1388; effect size 0.20) (Table 1).

Utility Index

The baseline Utility Index was significantly lower in patients who underwent transtibial amputation (TTA) (0.065 ± 0.29) than in patients with limb salvage (0.284 ± 0.35; p = 0.004), reflecting greater injury severity. Both groups demonstrated significant improvement after treatment ($p < 0.001$ in each group). The final Utility Index was higher in Group I (0.84 ± 0.06 vs. 0.813 ± 0.13), although the difference did not reach statistical significance (p = 0.39) (Table 2, Fig. 1).

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Δ Utility

The change in the Utility Index was significantly greater in the amputation group (median 0.762 vs. 0.457; Mann–Whitney p = 0.001; effect size = 0.81), indicating a substantially greater improvement in overall health status in this group.

Domain analysis

All five EQ-5D-5L domains demonstrated significantly greater improvement in the transtibial amputation group compared with the reconstruction group (p = 0.003–0.03). The greatest differences were observed in the Mobility, Self Care, and Pain/Discomfort domains. The proportion of patients who improved (Δ < 0) was consistently higher in Group I (> 90 % of cases) than in Group II (< 90 %) (Table 3).

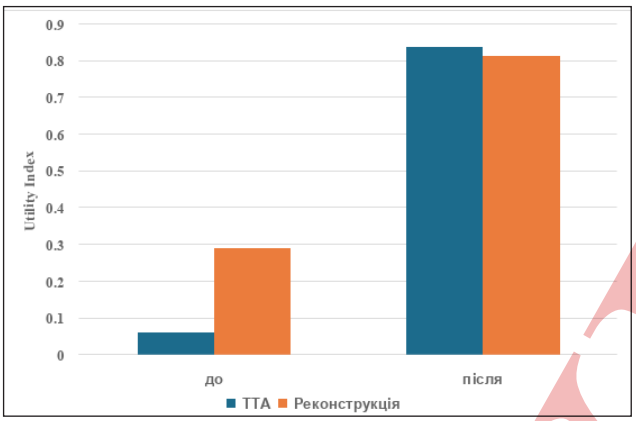


Figure. Changes in the Utility Index during treatment by study group

Convergent validity

Δ Utility demonstrated a moderate correlation with Δ VAS (ρ = 0.4; p = 0.0003) and strong correlations with key functional domains: Mobility (ρ = 0.62), Usual Activities (ρ = 0.58), and Pain/Discomfort (ρ = 0.55), all p < 0. These findings confirm the construct validity of the Utility Index as a sensitive multidimensional measure of changes in health status.

Discussion

The present study sought to assess the quality of life of patients who had sustained severe gunshot injuries of the lower leg and foot and whose treatment resulted either in TTA or limb salvage. Comparative analysis of outcomes between these

Table 1

Descriptive statistics of the patients included in the study

Indicator	TTA, n = 53	Reconstruction, n = 29	p, за α = 0.05
Age, years	38 ± 1.4	35.9 ± 1.5	0.3*
Number of operations	7.2 ± 0.8	5.7 ± 0.5	0.1*
G-A IIIA	8 (15.1 %)	13 (44.8 %)	0.003**
G-A IIIB	10 (18.9 %)	12 (41.4 %)	0.028***
G-A IIIC	35 (66.0 %)	4 (13.8 %)	< 0.0001**
Blast injury	34 (64.2 %)	15 (51.7 %)	0.27***
Fragmentation injury	19 (35.8 %)	14 (35.8 %)	0.27***

Notes: G-A — Gustilo-Anderson; * — two-sample t-test for means; ** — Fisher's exact test; *** — χ^2 test.

Table 2

Changes in quality of life according to EQ-5D-5L by study group

Indicator	I (TTA) mean ± SD	II (reconstruction) mean ± SD	p-value, between groups	Effect size
EQ-VAS, before	44.7 ± 12.9	49.2 ± 15.4	0.18**	—
EQ-VAS, after	75.6 ± 9.6	75.0 ± 10.4	0.90**	—
p, within groups	< 0.001*	< 0.001*	—	—
ΔVAS, (median [IQR])	32.5 [14.0]	25.0 [15]	0.1388***	0.20
Utility Index, before	0.065 ± 0.290	0.284 ± 0.350	0.004**	0.730
Utility Index, after	0.840 ± 0.06	0.813 ± 0.13	0.390**	0.280
p, within groups	< 0.001*	< 0.001*	—	—
ΔUtility (median [IQR])	0.762 [0.482]	0.457 [0.457]	0.001*	0.810

Notes: * — paired t-test; ** — t-test (unequal variances); *** — Mann–Whitney U test.

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Table 3

Data for domain analysis

Domain	Δ (group I)	Δ (group II)	Median (group I)	Median (group II)	p*	Effect size**	Improvement	
							group I	group II
MO	–2.6154	–1.9643	–3	–2	0.004	0.40	52 (98.1 %)	26 (89.7 %)
SC	–1.7115	–0.9286	–2	–1	0.003	0.43	49 (92.5 %)	15 (51.4 %)
UA	–2.0962	–1.5714	–2	–2	0.026	0.33	50 (94.3 %)	20 (69 %)
PD	–2.0385	–1.5000	–2	–1	0.01	0.37	49 (92.5 %)	26 (89.7 %)
AD	–1.3654	–0.9286	–1	–1	0.03	0.31	42 (79.2 %)	16 (55.2 %)

Notes: * — Mann-Whitney test; ** — rank-biserial correlation

two groups showed no statistically significant difference in quality of life.

We used the EQ-5D-5L, a health-related quality-of-life assessment system that is relatively unfamiliar in Ukraine but has good psychometric properties and is widely used internationally [9]. The five profiles, or domains, reflect the patient's physical and psycho-emotional characteristics, while the five response levels provide a numerical score for each domain, forming the respondent's health profile. The profile is used to calculate an integrated health measure, the Utility Index. The other component of the EQ-5D-5L is a visual analogue scale ranging from 0 to 100, on which patients rate their overall health status. In the context of our study, this approach allows for an appropriate comparison of sufficiently heterogeneous patient groups, both in terms of the severity of their open gunshot fractures and the fundamentally different treatment strategies applied.

Clinical studies of quality of life using the EQ-5D-5L make it possible to relate the findings to the corresponding national Utility Index. For example, L. de Kruijff et al. [8] assessed the quality of life of Dutch military personnel who had sustained severe gunshot injuries during combat operations in Afghanistan and Iraq. Two respondent cohorts were included, comprising 48 and 28 patients, with assessments conducted in 2010 and 2014, respectively. The UI was 0.78 and 0.81, respectively, whereas the national UI for men was 0.8. The authors concluded that this represented a so-called "healthy soldier effect". In an earlier comparable study conducted by A. Ringburg et al. in 2011 [10], the UI among severely injured patients in the general Dutch population was 0.73.

Regarding comparative limb salvage versus amputation studies, two of the largest projects should be mentioned: LEAP and METALS [11, 12]. LEAP (Lower Extremity Amputation Project) was a multicenter study investigating the outcomes of treatment in 601 civilian patients with severe lower-extremity trauma who underwent either reconstructive treatment or amputation. The authors concluded that, in both groups, long-term outcomes were similarly poor.

METALS (Military Extremity Trauma Amputation / Limb Salvage) was initiated to test the hypothesis that amputation and reconstructive treatment do not differ in terms of quality-of-life outcomes among wounded military personnel. The study included 868 service members who sustained upper- and lower-extremity injuries (excluding the pelvis and acetabulum) during military service in Afghanistan and Iraq and who underwent high-level amputations (proximal to the hindfoot and wrist) or reconstructive treatment. The injuries included traumatic amputations, Gustilo-Anderson IIIB and IIIC open fractures, selected IIIA fractures, vascular injuries, extensive soft-tissue injuries, and severe foot and hand injuries. After all exclusions, 324 patients with lower-extremity injuries remained (reconstructive treatment — 126, amputation — 113, bilateral injury — 85). The SMFA was used to assess functional status, along with questionnaires evaluating depression, post-traumatic stress disorder, chronic pain, and sports activity. Patients with any level of lower-extremity amputation demonstrated better functional outcomes across all SMFA domains ($p < 0.01$). Older patients were shown to have poorer outcomes across all domains and were more likely to experience pain. Somewhat unexpectedly, the level of amputation and time since injury did not affect functional treatment outcomes. Some skepticism may also be warranted regarding the regression analysis in the reconstruction group, as the authors found no differences in treatment outcomes according to the number of injured bones or the level of injury.

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Twelve years later, a kind of remake of the METALS project was published [13], which, incidentally, closely matched our study in terms of the inclusion criteria. The authors used the previous clinical cohort and compared the functional outcomes of TTA with those of two groups of patients with limb salvage: patients with severe gunshot injuries of the foot and ankle and those with severe gunshot injuries of the lower leg. Across all SMFA domains, functional outcomes were better in the amputation group.

The findings of our study are less optimistic. Health status measured by EQ-VAS did not differ significantly between the two groups either at hospital admission or after completion of treatment. In contrast to EQ-VAS, the baseline Utility Index in Group I (TTA) was significantly lower, reflecting greater severity of lower-extremity injury. This was supported by the frequency distribution of Gustilo-Anderson IIIC injuries in the TTA and reconstruction groups (35 vs. 4, $p < 0.0001$). After completion of treatment, the Utility Index did not differ statistically between the groups, although it was higher in patients who underwent TTA (0.84 ± 0.06 vs. 0.813 ± 0.13; $p = 0.39$).

Comparison of changes in EQ-VAS and the Utility Index during treatment is particularly interesting. ΔVAS did not differ significantly between the groups (32.5 [14.0] vs. 25.0 [15], $p = 0.1388$), with a small effect size of 0.20, in contrast to ΔUtility Index (0.726 [0.482] vs. 0.457 [0.457], $p = 0.001$), which demonstrated a large effect size of 0.81. These findings suggest that EQ-VAS is insufficiently sensitive because of its unidimensional nature. In contrast, the Utility Index, as an integrated measure, appears to be a more sensitive tool for assessing quality of life.

Thus, the magnitude of improvement in patients in Group I (TTA) was greater across all domains than in Group II with limb salvage, and this difference was statistically significant ($p = 0.003–0.03$). The greatest differences were observed in the Mobility, Self Care, and Pain/Discomfort domains. The proportion of patients who improved ($\Delta < 0$) was consistently higher in Group I (> 90 %) than in Group II (< 90 % of cases). This substantial improvement in quality of life among patients who underwent TTA does not in any way imply that amputation is a superior treatment method for severe gunshot injuries of the lower leg and foot. Rather, it indicates that in patients with the most severe injuries (Gustilo-Anderson IIIC), amputation results in a greater functional gain and a higher final Utility Index than reconstructive treatment.

Summarizing the findings of our study, it should be noted that in patients with severe gunshot injuries of the lower extremity, both limb reconstruction and amputation represent a compromise between the principal advantages and disadvantages of these two treatment strategies. Amputation followed by prosthetic rehabilitation provides relatively rapid restoration of mobility, in some cases sufficient even for military service. However, awareness of the absence of a body part and phantom sensations may contribute to persistent depression and psychological and social maladaptation. Limb salvage provides a sense of physical integrity; however, prolonged staged treatment and the lack of clear prospects for restoration of weight-bearing and locomotor function may cause depression no less severe than that associated with an amputated foot or lower leg.

Given these conflicting considerations, any comparative reconstruction-versus-amputation study should be interpreted with caution. Moreover, establishing truly comparable groups for such an analysis is probably impossible because of the polymorphism and heterogeneity of severe gunshot injuries of the lower extremity.

Conclusion

Thus, the assessment of quality of life using the EQ-5D-5L in patients with severe gunshot injuries of the lower leg and foot (Gustilo-Anderson IIIA–IIIC), at least 30 days after injury, who underwent TTA or reconstructive treatment demonstrated no statistically significant difference one year after completion of treatment, either in VAS or in the Utility Index. Overall health status assessed by VAS did not differ between the groups either before or after completion of treatment. The baseline Utility Index was significantly lower in patients who underwent TTA, whereas after completion of treatment it was higher, although the difference did not reach statistical significance. The change in VAS did not differ significantly between the groups, whereas the change in the Utility Index and in all five domains demonstrated significantly greater improvement among patients who underwent TTA. The proportion of patients who improved was also higher in the TTA group (> 90 % of cases) than in the reconstruction group (< 90 % of cases).

Therefore, quality of life assessed by EQ-5D-5L does not differ significantly between patients with

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severe gunshot injuries of the lower leg and foot who undergo TTA and those who undergo reconstructive treatment, although patients in the amputation group had a poorer baseline condition, attributable to more severe injuries, which were significantly more prevalent in this group. The uneven distribution of patients according to the severity of the open fracture and the heterogeneity of gunshot injuries preclude a definitive conclusion regarding the absence of differences in quality of life between patients undergoing TTA and those undergoing reconstructive treatment. Further studies of this issue will require the development of inclusion criteria that reduce the risk of bias.

The substantial difference in the distribution of patients between the limb-salvage and amputation groups is expected not only for Gustilo-Anderson IIIC injuries but also for IIIA and IIIB injuries. Increasing severity of the open fracture increases the number of amputations and decreases the number of cases in which reconstruction is feasible. Thus, Gustilo-Anderson IIIC injuries result in amputation in up to 30–40% of cases during the acute period and in up to 90% in the long-term period. Certainly, reconstruction may be performed in a patient with a IIIC injury, while amputation may be performed in a patient with a IIIB injury; however, this does not alter the fundamental trend: increasing injury severity is associated with a higher frequency of amputation. The limb-salvage-to-amputation ratio is specified in each comparative study, but this trend has long been recognized by most authors investigating severe lower-extremity trauma. Naturally, the difference in the distribution of patients between the groups affects study outcomes and increases the risk of bias; this is a general limitation of all studies of this type.

Conflict of interest. The authors declare no conflict of interest.

Prospects for further research. Assessment of quality of life using the EQ-5D-5L in patients of different age groups and not limited to the orthopedic and traumatological population may provide a basis for developing a Ukrainian national EQ-5D-5L value set.

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QUALITY OF LIFE ACCORDING TO EQ-5D-5L IN PATIENTS WITH COMBAT TRAUMA OF THE LOWER EXTREMITY AFTER TRANSTIBIAL AMPUTATION AND RECONSTRUCTION

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