



SUBSTANTIATION OF THE EFFECTIVENESS OF TREATMENT OF FRACTURES OF THE MANDIBLE IN PERSONS OF DIFFERENT AGE CATEGORIES WITH AN AUTOTHROMBOCYTE MASS

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Annotation. In peacetime, the causes of fractures of the lower jaw are most often blows and bruises received during a fall, compression, etc. Currently, the frequency of transport and household injuries has increased.

A fracture of the lower jaw usually occurs as a result of the impact of a force that exceeds the physical capabilities of the bone tissue. Such a fracture is called traumatic.

There are four mechanisms of fracture of the lower jaw: inflection, shift, compression, separation.

Keys words:

It is known that the causes of fractures of the lower jaw are different, and the degree of fracture depends on the level and duration of external influences. Accordingly, the types of fractures also differ, as well as the first medical and specialized care provided for them, the tactics of surgical treatment based on the above. Therefore, before proceeding to the tactics of surgical and conservative treatment of fractures of the lower jaw, we found it necessary to focus on the description of injuries.

It is known that unilateral fractures are observed in most patients of the main group (I=138) (Table 1.1).

CONSEQUENCES OF FRACTURES OF THE LOWER JAW.

	Main group (I=138)		Main group (I=138)	
	Comparison group (I=61)		Comparison group (I=61)	
	Absolutely %	Absolutely %	Absolutely %	%
Fracture from one place	83	60,14±4,17	43	70,49±5,84

Fracture in two places	41	29,71±3,89*↓	13	21,31±5,24*↓
Multiple fractures	14	10,14±2,57*↓	5	8,20±3,51*↓

*Note: *-a sign of a convincing difference with the refractive indices from one place; ↓-the direction of changes.*

As can be seen from the results obtained, the fracture trend in both compared groups was quantitatively very close to each other, single-fragmental fractures significantly exceeded two- and multi-fragmental fractures ($R < 0.001$), jaw fractures were 2.02. times ($60.14 \pm 4.17\%$ vs. $29.71 \pm 3.89\%$, $R < 0.001$) and 5.93 times ($60.14 \pm 4.17\%$ vs. $10.14 \pm 2.57\%$ vs. $10.14 \pm 2.57\%$ $R < 0.001$) were overdiagnosed. It is worth noting that these indicators coincide, if we compare the causes of mandibular fractures, the main part of bilateral fractures is caused by street and household injuries ($I=24$), the rest is industrial ($I=5$) and sports injuries ($I=12$) was correct. Most fractures occurred in road traffic ($I=11$) and sports ($I=3$) injuries. (Figure 1.1)

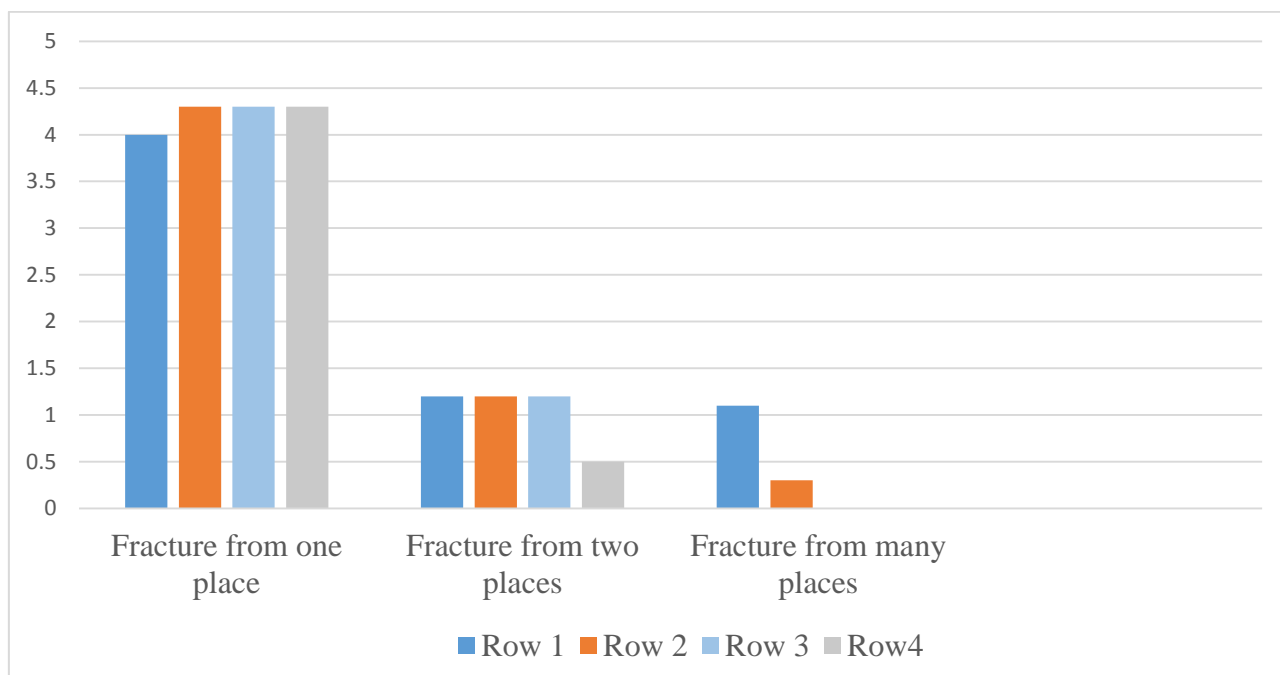


Figure 1.1. The frequency of fractures of the mandible for reasons, in absolute numbers

It can be seen that fractures in one and two places are mainly associated with street and domestic injuries. Multiple fractures were recognized as an important condition, mainly as a result of road traffic injuries. In our opinion, it is necessary to pay attention to these cases when developing the prevention of fractures of the

lower jaw among the population. A similar result was obtained in the comparison group.

There were no significant gender differences in the nature of mandibular fractures, which was not a noteworthy aspect, so we did not stop at interpreting and evaluating the figures of this difference.

Thus, the description of mandibular fractures in adults shows that fractures of one localization prevailed in patients (60.14% in the main group versus 70.49% in the comparison group), bilateral fractures (29.71% and 21.31%) and many fractures. The intergroup results were similar for dislocation (10.14% and 8.20%), but the figures were not statistically significant ($R > 0.005$). This confirmed that the selected groups were representative of each other. It has been established that the main causes of fractures in one place are street and household injuries in the main group, transport and sports injuries with multi-site fractures and street, household, sports and industrial injuries with double-jaw fractures. The distribution in the comparison group was almost the same.

Taking into account the significance of the sides and the type of injury, in addition to the above indicators for fractures of the lower jaw, a distribution was carried out according to these indicators.

The results showed that there was no significant difference between unilateral and bilateral fractures of the mandible, but unilateral fractures were more common than bilateral fractures. As for statistical analysis, the difference in the main group was 1.16 times ($53.62 \pm 4.25\%$, $I=74$ and $46.38 \pm 4.25\%$, $I=64$, $R > 0.005$), in the comparison group this difference was 1.54 ($60.66 \pm 6.25\%$, $I=37$ and $39.34 \pm 6.25\%$, $I=24$, $R > 0.05$). It is noteworthy that the figures of both groups are in the same trend. It should be noted that the higher frequency of unilateral fractures of the mandible compared with bilateral fractures is consistent with the results of previous studies and a review of scientific sources.

The manifestations of trauma in fractures of the lower jaw differed from the analyzed indicators of open and closed injuries, since the differences between the indicators in both groups were significant.

In the main group, this difference was 1.82 ($64.49 \pm 4.07\%$, $I=89$ and $35.51 \pm 4.07\%$, $I=49$, $R < 0.05$), in the comparison group it was 2.59 times more reliable. , $I=44$ and $27.87 \pm 5.74\%$, $I=17$, $R < 0.001$). But the fact that the results again show the same trend indicates the representativeness of the groups. Statistically significant ($R < 0.05$ - $P < 0.001$) difference between open and closed injuries in the examined patients is associated with the causes that caused them (external influences). In both groups, all unilateral fractures of the mandible

were caused by personal and professional injuries, while the causes of bilateral fractures of the mandible were numerous (street, household, transport, sports and industrial). This situation was also found when comparing the level of open and closed injuries. The causes of closed injuries were mainly domestic and street injuries, open injuries and other causes under consideration were also observed. /

order to have a clear idea of the results obtained and to facilitate comparative analysis, the results were presented in the form of different pictures. The sides of fractures of the mandible are presented by us in Figure 3.2.

Unilateral fracture of the jaw

■ - Bilateral fracture of the jaw.

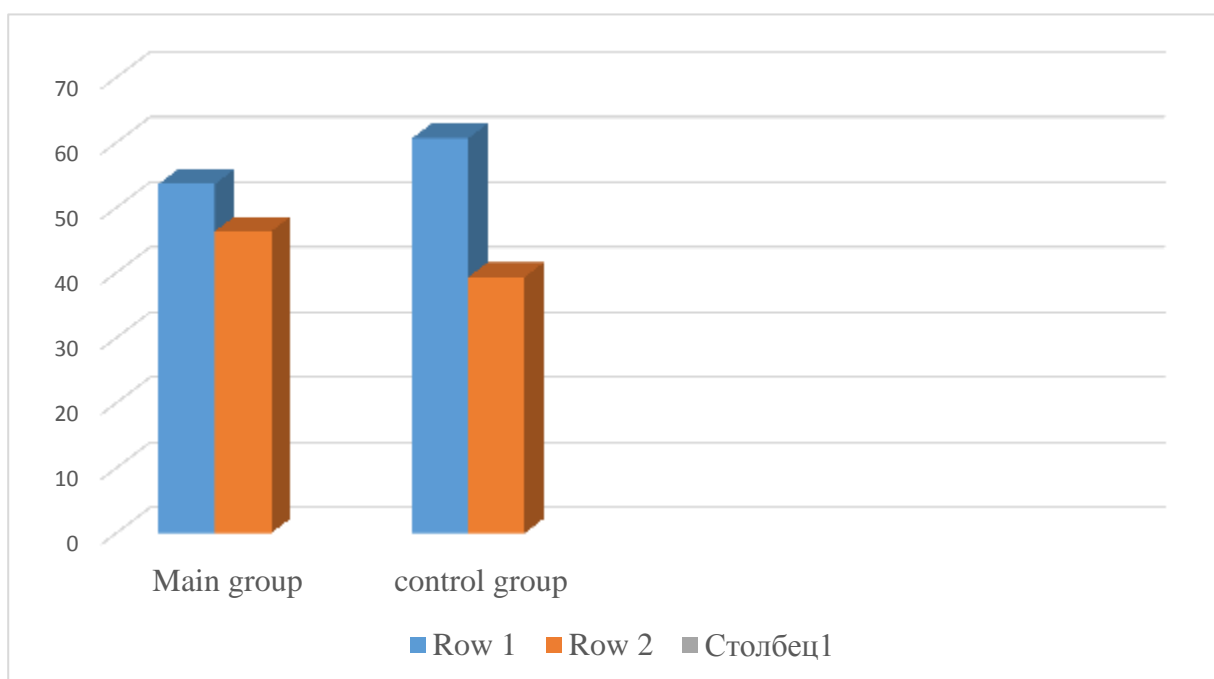


Figure 1.2. Distribution of patients of the main group and the comparison group with fractures of the mandible on the side of injury, %

The proximity of the obtained results is clearly visible, in both cases it was found that unilateral fractures were more common than bilateral ones.

This trend was also determined by the forms of injury (closed and open) - Fig 3.3. - open injury

- closed injury

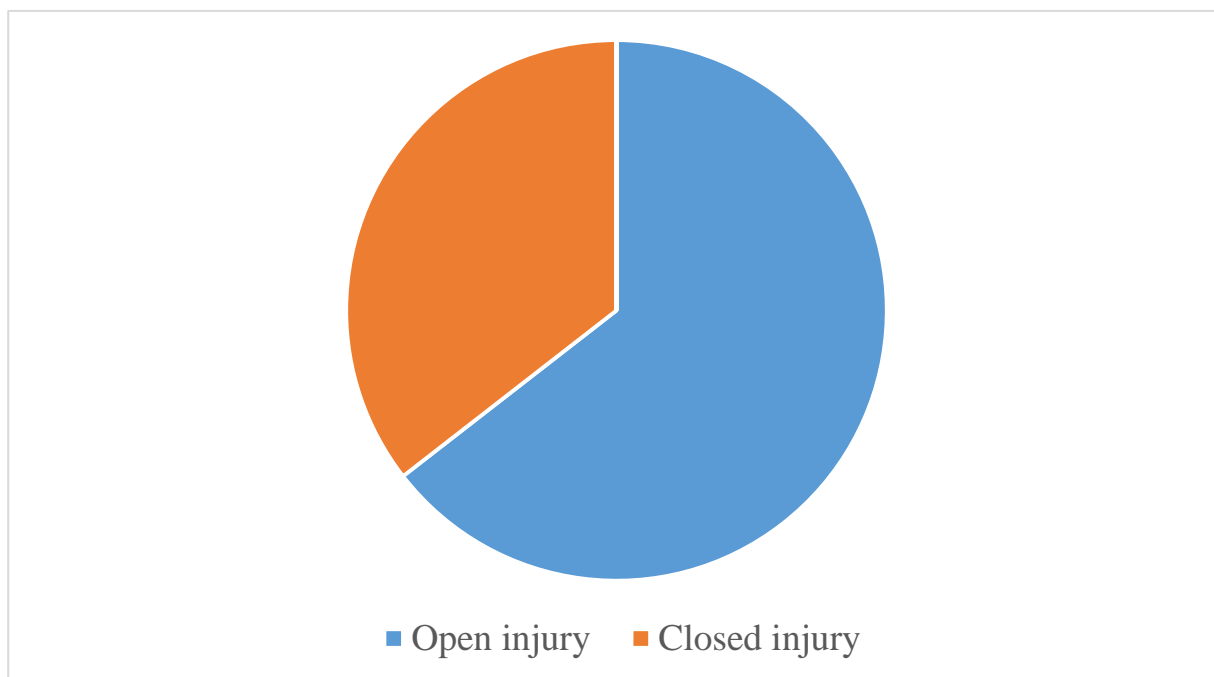


Figure 3.3. Distribution of patients of the main group and the comparison group with a diagnosis of mandibular fracture by type of injury, % (A-the main group, B-the comparison group).

Unlike the first case, convincing results were observed in both groups, this statistically significant ($R < 0.001$) difference was in favor of an open injury, the severity of the differences was obvious.

Thus, the incidence of mandibular fractures in adult patients showed that unilateral fractures were more common than bilateral fractures - 1.16 times in the main group, 1.54 times in the comparison group, and a comparative analysis of closed and open fractures showed that open injuries were diagnosed more often than closed injuries, this condition showed the same tendency and intensity in both groups compared. The difference between fractures was 1.82 times in the main group and 2.59 times in the comparison group in favor of open fractures. ($P < 0.0001$). The analysis of their dependence on the causes of injury showed that the causes of unilateral and closed fractures are mainly street and domestic injuries, and the causes of bilateral and open fractures, in addition to these two causes, are road traffic, sports and industrial injuries. . All these conditions must be taken into account when developing surgical and conservative treatment and primary prevention of mandibular fractures.

The first medical and specialized care provided for various bone fractures is of great importance, since the effectiveness of therapeutic measures, the absence of complications and the high quality of life of the patient depend on these aspects.

Fractures of the mandible are no exception to these cases. Taking into account the above, we divided the lower jaw of injured victims according to the methods of splinting and surgical treatment.

Indications for patients with fractures of the lower jaw. Parameters of medical care.

	Main group I=138		Comparison group I=61	
	Absolutely	%	Absolutely	%
Strapping with a Tigerstedt-Vasiliev tire.	138	99,28±0,71	60	98,36±1,63
Osteosynthesis with mini plates	6	4,35±1,74*↓	6	9,84±3,81*↓
This is an operation to remove 8 teeth on the fracture line.	94	68,12±3,97*↓	45	73,77±5,63*↓

*Note: * is a significant difference.*

↓-direction of changes.

Analysis of the figures presented in Table 3.3 showed that the main method of care and treatment in this region was splinting with the Tigerstedt-Vasiliev splint, in both groups this method was used in almost all patients - 99.28±0.71%, respectively (I=137) and 98.36±1.63% (I=60). This method of treatment was used regardless of the localization, type and nature of injuries, and due to the effectiveness of this method, there was no need for widespread use of other methods. In a small number of patients (4.35±1.74% I=6 and 9.84±3.81% I=6), osteocytosis with mini-plates was used.

In case of fractures of the lower jaw, if the fracture line passes through the area of the wisdom tooth, the experience of pulling it out is also known in medical practice, taking into account that surgical interventions and bone healing are difficult (± 3.97%) and in the comparison group in 45 cases (73.77 ± 5.63%). No intergroup differences were found between the results obtained (R>0.001).

At the next stage of our study, we analyzed the duration of surgical interventions, because the earlier specialized care is provided, the higher the therapeutic effect, the number of complications it was shown that the smaller it is,

the better the prognosis for the end of the disease. In addition, patients quickly recover their ability to work and improve their quality of life.

The distribution of all patients according to the duration of surgical treatment is presented in

Table 1.4.

Distribution by timing of surgical interventions in patients with fractures of the mandible.

	Main group I=138 Comparison group I=61		Main group I=138 Comparison group I=61	
	Absolutely %	Absolutely %	Absolutely %	%
1 day	89	64,49±4,07	49	80,33±5,09
2nd day	10	7,25±2,21*↓	3	4,92±2,77*↓
Day 3	8	5,80±1,99*↓	2	3,28±2,28*↓
Day 4	8	5,80±1,99*↓	3	4,92±2,77*↓
Day 5	9	6,52±2,10*↓	1	1,64±1,31*↓
Day 6	5	3,62±1,59*↓	1	1,64±1,31*↓
7th day	6	4,35±1,74*↓	1	1,64±1,31*↓
more than 7 days	3	2,17±1,24*↓	1	1,64±1,31*↓

*Note: * is a significant difference.*

↓-direction of changes.

According to the results obtained, the majority of surgical interventions were performed on the 1st day of hospitalization (64.49±4.07%, I=89 and 80.33±5.09%, I=49), the remaining patients were evenly distributed by day. These parameters were compared with the days when patients went to the hospital to obtain actual results, so that it became clear that surgical interventions were carried out on the same days. The results obtained by groups were presented in the form of figures Comparative indicators of the duration of surgery and hospitalization in the main group of outcomes of mandibular fractures, %.

From the above picture 1.4 it can be seen that basically, when the patient came with a request, he was provided with prompt assistance, since the pictures taken are very close to each other. A similar result was obtained in the comparison group.

And late complications, which include secondary bleeding, bronchopulmonary complications, contracture, consolidation of fragments in the wrong position, delayed consolidation, formation of a false joint, traumatic osteomyelitis.

Thus, in patients with mandibular fractures, complications that developed during and after treatment were the same in both compared groups (main and comparison) - in 21.01% and 21.31% of cases, respectively. Among them, early complications were detected in 12.06% and 9.05% of the total number of patients (I=199). Of the 6 identified complications, early suppuration of bone tissue was the least common (1.51%), and the most frequent was later (4.52%).

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