1. INTRODUCTION

Today fast life, increase accidents and injuries during sports activities and recreation, breaks ankle playing an important role in traumatology in the last decade. Injured people are usually young and middle-aged, active labor, usually a good general condition. The most important part of the hock is posterolateral segment and tibiofibular syndesmosis whose injury in most cases can only treat stable fixation and postoperative rehabilitation, which earlier operated hock (1).

Anatomically hock make articular surface of distal tibia, than maleolus of tibia, and fibulae and talus building talocruralis wrist and tibiofibular syndesmoza (front and rear tibiofibular ligament, interosal ligament). Ankle stability is provided with a firm capsule, ligaments, which moves allow flexion and extensions as well as a very small movement abduction and adduction which can be played mostly in subtalar wrist joints and the central part of the foot.

Today most important are two classification of ankle fractures, first is Lange-Hansen classification and second is Denis-Weber’s classification of Swiss-German (2).

Lange-Hansen classification of ankle fractures is divided into (3):

- supinatio-eversion
- pronatio-abduction
- pronatio-eversion
- pronatio-abduction

Denis-Weber’s classification (ABC classification by AO group) shared breaks ankle at:

A - the injury under syndesmosis
  • A1 isolated
  • A2 with fracture of median maleolus
  • A3 dorsomedial fractured tibia
B - fractured fibulae of the syndesmosis:
  • B1 isolated
  • B2 with medial injury
  • B3 with medial injury and fracture of Volkman’s triangle
C above the break fibulae syndesmosis:
  • C1 diaphysis fractured fibula - simple
  • C2 diaphysis multifragmental fractured fibula
  • C3 fracture proximal fibula

2. AIM

Despite the significant shift in development traumatology, application of new diagnostic, operational and rehabilitation methods, are still present dilemma about the suitability of certain known classification and therapeutic procedures (4). Until now known classifications are insufficient, and sometimes is unclear and the importance and role of certain operating procedures. This work is that the convergence of the anatomy, mechanism of injury, injury classification, diagnostic and therapeutic methods in our experience we try to help to solve this traumatic problem.

3. MATERIALS AND METHODS

This work are included only patients with isolated fracture of ankle treated in our clinic during 2007-2008 years. There were 30 patients with ankle fracture. All patients of this study were an indication for surgical treatment and were divided into two groups.

The first group comprised patients who were surgically immediately upon receipt and disposed of the second group comprised patients whose operative care was delayed. All patients had postoperative follow-up after 6 months and one year. Preoperative each patient had X-ray recording ankle in 2 directions.

4. RESULTS

In the course of a year is treated 30 patients with ankle fractures. Patients were divided into two groups. In the first group in which patients immediately upon receipt of surgically treated, there were 16 patients in the second group, which was delayed surgery was 14 patients. Of the total, was immediately operated 17 patients (63%) and in 13 (37%) was deferred operations. The range of years has ranged from 17 to 83 years. Average age at the first group was 45 years and in other groups average age was 43 years. More were women, 16 vs 14.

Most were bimalleolar fractures, 16 patients, unilateral fractures was at least, 5 patients while trimalleolar fractures were in 8 patients. In only one case was an open fracture. From complications of a group that was immediately operated on one case, while the group...
was subsequently operated of 5 cases. Statistics: t-Test - to give the sample size (subjects 16 vs. 14), SD (1.0), sample size (10-10), and alpha (0.050), the strength of the sample was 0.988. On average, considering the size of the sample, the observed difference of 2.0 will be expressed with 95% reliability. The reliability interval of 1.08.

5. DISCUSSION

Nowadays fast living leads to a growing number of traffic accidents, injuries and sports activities are breaks ankle growing surgical-rehabilitation problem. According to our results of ankle fractures occur most often the younger working population that is active. The results obtained do not differ from the results obtained in the study, Medina M. and ass. where the average patient was about 40 years (5). According to a study Kukk and ass. easier for a sample of 58 patients and study Eitenmüller and ass. and easier for the 19 patients obtained results were indicated that a far greater percentage of higher quality, faster healing and better rehabilitation of any biodegradable implants than with traditional metal plate (6). Unfortunately, despite all this knowledge in the application of new implants, we currently, as a country as a whole, not in a financial opportunities that we so quick to follow global trends because our health insurance budget is limited and insufficient. Our obtained results unambiguously show that the far greater advantage now operate on patients with ankle fracture regardless of the degree of injury because the results show that postoperative complications are kept to a minimum, a shorter hospital stay with quicker post operative rehabilitation period which fits into the European standard (7). This is especially important for working-age population as this community is losing a little shorter Hospital stay, do not strain the health care fund. In patients who do not belong to the working age population is our opinion that the surgery will be delayed in order to better prepare patients because these patients are usually overloaded and some other chronic diseases. We also noticed that the classification of ankle fractures and the lack of Lauge Hansen classification which is not defined as all fractures, while the Denis-Weber’s classification is not about the mechanism of injury (8). A special problem are patients who have diabetes. In these patients usually present microangioneuropaties changes and are far more complications, longer for treatment, which resulted in a longer recovery and rehabilitation (9). In our study was a patient, insulin dependent diabetes in which we had a postoperative complication in terms of infections and dehiscention of wounds that had to be treated as long-term healing is prolonged rehabilitation period which again at the end he gave a completely satisfactory result. Blotter and ass. are in his study, pointed to the problems of treatment of ankle fractures in diabetic patients who did not at all different from our findings. He suggests that these patients must be immediately disposed of surgically regardless of the degree of fracture, to spare the surrounding tissue, implement good drainage, antibiotics include a wide spectrum and it holds less rigid immobilization. At physical rehabilitation after the fracture treatment has consisted of immobilization joint: magnetic, kineziterapy, krismassage which fully corresponds to modern treatment, such as introduced in clinical practice after the 31 studies conducted in Australia (Lin CW et al.) (10)

6. CONCLUSION

Based on our work and the results obtained in the conclusion we can say that many factors affect the ultimate outcome of the treatment of ankle fractures. These factors primarily include type of fracture, age of the patients, adequate or inadequate reposition, maleus lateral position, the size of the last fragment, diabetes, injury rehabilitation (11,12). Our results showed that

<table>
<thead>
<tr>
<th>Type of fracture</th>
<th>Operated immediately after injury</th>
<th>Surgery later</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unilateral</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Bimaleolar</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Trimaleolar</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Open fracture</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

TABLE 2. Type of fracture

<table>
<thead>
<tr>
<th>Type of fracture</th>
<th>Operated immediately after injury</th>
<th>Surgery later</th>
</tr>
</thead>
<tbody>
<tr>
<td>Necrosis of op. wound</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Infection</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Male sanata fracture</td>
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<td>1</td>
</tr>
<tr>
<td>Not overgrown fracture</td>
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<td>0</td>
</tr>
<tr>
<td>Compartment syndrom</td>
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<td>0</td>
</tr>
<tr>
<td>Sy Sudeck</td>
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<td>0</td>
</tr>
<tr>
<td>DVT</td>
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<td>1</td>
</tr>
</tbody>
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TABLE 3. Complication of the used surgical procedures
better results in the treatment of ankle fractures is aggressive treatment immediately after trauma, reconstruction articular surface and tibiofibular syndesmosis with early rehabilitation. Routine exploration deltoid ligament is not required. At low C-type fractures stabilization transfixation screw is recommended for deltoid ligament injuries, with complete rupture of syndesmosis and shift talus with or without fibulae dyastasis. For high C-type fractures operate with two or more cortical screws. In recent years, fixation is performed resorptive (biodegradable) fixation material (screws and plates), and once the fixation of fractures osteochondral perform arthroscopic. Unfortunately, given that our country’s limited health budget we have not started to apply the previously mentioned methods of surgical stabilization. Painful hock may be a consequence and the instability, especially the lateral ligamentar complex, and unstable subtalar joint.

REFERENCES
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