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Epidemiological Situation of Soft Tissue Sarcomas of The Extremities According to Histological Verification in The Republic of Uzbekistan

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Resume

Purpose: to evaluate the frequency of soft tissue sarcomas of the extremities by histological type. **Materials and methods.** Our study was carried out in 2015-2021. on 233 patients hospitalized in the Republican Specialized Scientific and Practical Medical Center of Oncology and Radiology. Patients are considered to be patients with soft tissue sarcomas that occurred on the extremities from 2015 to 2022. The mean age of the patients was 53.2 ± 0.2 years. Results. Among these patients, 135 (58%) were women and 98 (42%) men. Our study was conducted on patients aged 19 to 75 years. The mean age of the patients was 53.2 ± 0.2 years. When characterizing patients by sarcoma localization, the frequency of the upper extremities, soft tissue sarcomas was 70 (30.5%). There were 162 (69.5%) patients with soft tissue sarcomas of the lower extremities. The histologic morphology was fibrosarcoma, with 26 (36.6%) in the arms and 62 (38.2%) in the legs. Conclusions. The mean age of patients with soft tissue sarcomas found on the legs and arms during analysis was 53.2 ± 0.2 years, more often observed in women (58%). This can be explained by the hormonal waves that women carry throughout their lives, and the high sensitivity of sarcomas to hormonal changes. In histological analysis, a greater number of cases of fibrosarcoma on the legs and arms can be explained by the fact that the fibrous tissue in the area of the post-traumatic scar is due to the fact that the legs and arms are more susceptible to various external influences than other localizations. Key words: soft tissue sarcomas, morbidity, fibrosarcoma.

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Despite the fact that the development of medicine is closely related to the development of mankind, many medical problems are waiting for their solution. One such urgent problem is soft tissue sarcoma (STS). The problematic aspect of STS is the diversity of the disease and, at the same time, the disease is encountered in most cases, aggressive course, rapid progression, distant metastases, rapid recurrence, and poor treatment results [1, 2]. STS is a rare group of tumors, accounting for 1% of adult cancers and 15% in children [3, 4]. Extremities, internal organs, trunk, and retroperitoneal space are the most common sites, accounting for 70% of all cases [4, 5]. Sarcomas are considered a broad family originating from all mesenchymal tissues in the body, including pathologies of a number of tissues such as liver, muscle, fibrosis, tendon and bone. There are more than twenty different types of sarcomas [6]. According to historical classifications, bone and soft tissue sarcomas are divided into two groups according to their molecular classification: genetically complex, strongly mutating, complex karyotype, and types with a relatively quiet genomic background that have undergone a single disease-specific translocation and amplified mutation [7]. STS accounts for 1% of all cancers and is observed in the hands in 60% of cases [10,11]. It is observed more in the arms compared to the hands, the ratio is 4:1 [12,13]. According to studies, the incidence rate of STS is 2.49-5.87 per 100,000 population, and the 5-year survival rate after diagnosis is 55.5-56.5% [14, 15]. However, the 5-year survival rate of patients with late-stage STS drops dramatically, i.e. 27.2% [14]. In addition, distant metastases develop in 40-50% of patients with STS [16]. If we pay attention to the statistical data of our country, in 2020 the

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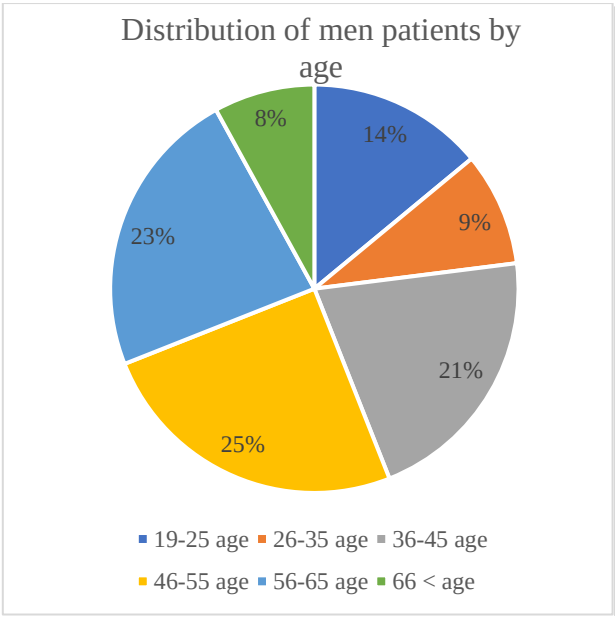
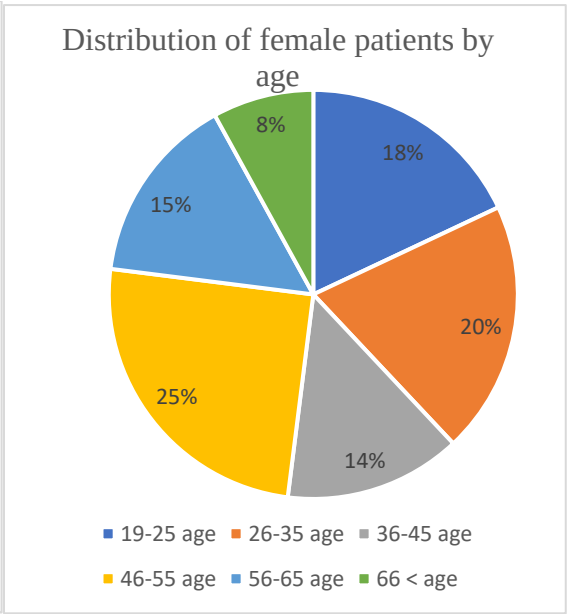
number of cases of soft tissue tumors will be 410, which corresponds to 1.2 cases per 100,000 population. Of these, 6.6% of cases were detected in stage I, 53.2% in stage II, 18.8% in stage III and 12.4% in stage IV. The five-year survival rate was 40.1%. As can be seen from the above points, despite being an urgent problem in all countries, STS is a disease that is poorly studied and requires a lot of scientific research.

The purpose of the study: to assess the incidence of soft tissue sarcomas in the extremities in relation to histological type.

Material and methods: Our scientific work was carried out during 2015-2021 on 233 patients who received inpatient treatment at the Republican Specialized <Oncology and Radiology Scientific and Practical Medical Center (RIO and RIATM), the Fergana branch of RIO and RIATM, and the Tashkent city branch of RIATM. Patients were diagnosed with soft tissue sarcomas of the neck and hands from 2015 to 2021. 135 (58%) of these patients were women, and 98 (42%) were men. The average age of patients was 53.2 ± 0.2 years

Results: Patients were selected from 2015 to 2022 with soft tissue sarcomas of the extremities. 135 (58%) of these patients were women, and 98 (42%) were men. Our research was carried out on patients aged 19 to 75 years.





The average age of patients was 53.2 ± 0.2 years. The distribution of patients by age is presented in Figure 1, 2

The distribution of patients by localization, n=233 - is presented in Table 1

MKB	**Soft tissue found in the extremities sarcomas**	Abs	%
C49.1	Soft tissue found in the lower extremities sarcomas	72	31%
C49.2	Soft tissue found in the upper extremities sarcomas	161	69%
Total		233	100%

According to the anamnesis of the patients, it was found that most of the patients suffered from long-term stress, injuries to the extremities, lack of timely treatment by specialists, poor quality diet, long and irregular

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intake of conservative drugs, and as a result, they became ill with soft tissue sarcomas in the arms and legs. Patients were characterized by the location of the sarcoma (Table 1.) and it was found that the legs were more common (69%).

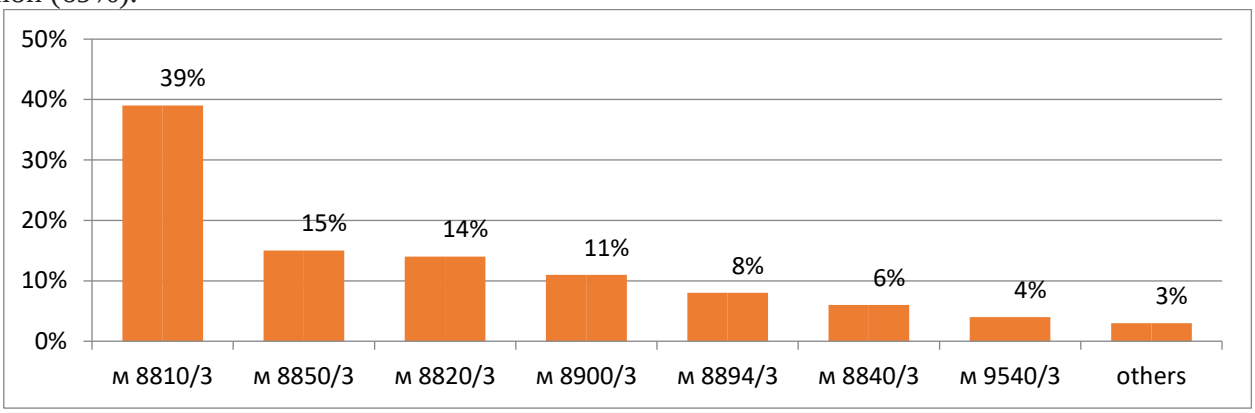
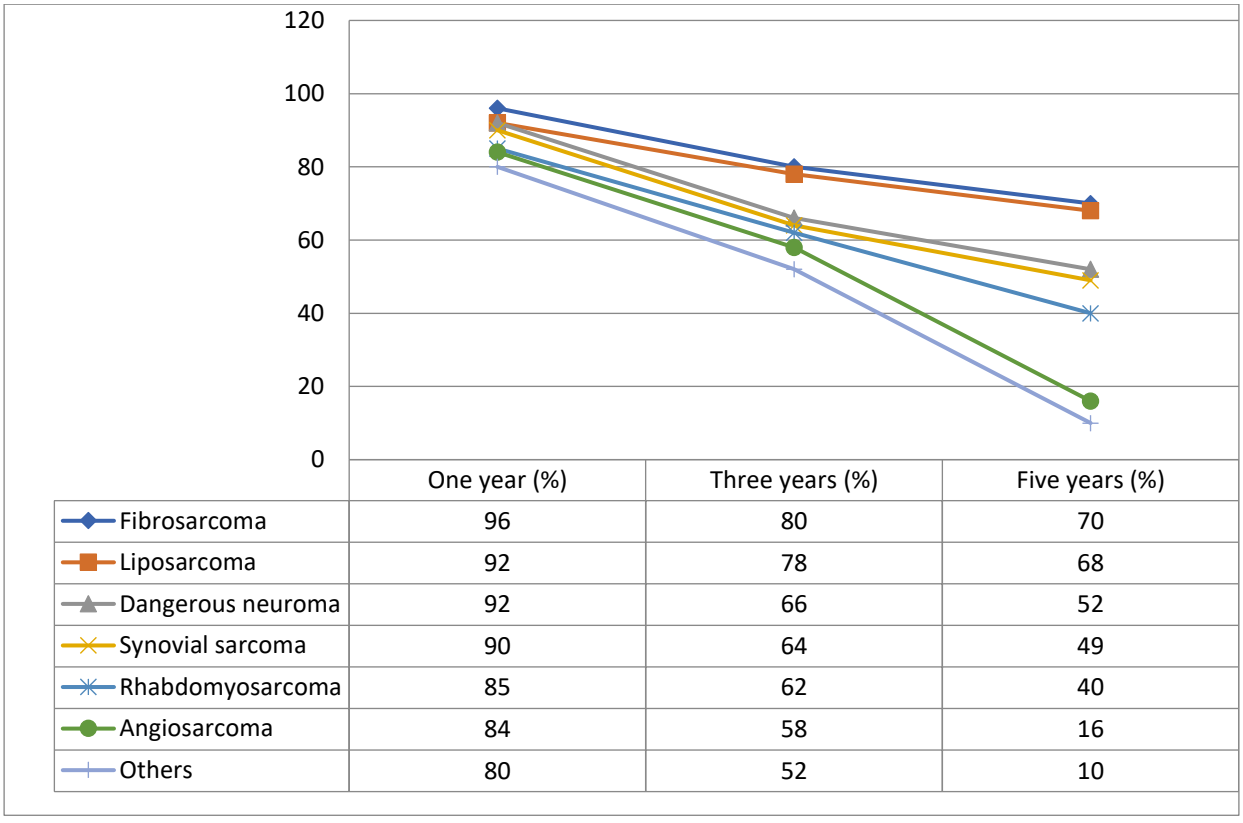


Figure 3. Patients with soft tissue sarcomas in Uzbekistan in 2015-2022 distribution of patients by histological type, %

In addition, patients were described by histological types (Figure 3). According to him, the most common histological morphology was fibrosarcoma, which was 39% in hands. This is because most of the hand and shoulder areas are prone to injury. In most patients, we can see that fibrosarcomas are caused by various influences from the fibrous tissue in the post-injury scar area.



	One year (%)	Three years (%)	Five years (%)
Fibrosarcoma	96	80	70
Liposarcoma	92	78	68
Dangerous neuroma	92	66	52
Synovial sarcoma	90	64	49
Rhabdomyosarcoma	85	62	40
Angiosarcoma	84	58	16
Others	80	52	10

Figure 3. Survival rates of patients with soft tissue sarcomas of the extremities in Uzbekistan by morphological type, %

However, the survival rate of patients with soft tissue sarcoma of the feet and hands was studied (Figure 4), and according to it, the five-year survival rate of patients with fibrosarcoma was 70%, compared to 16% for patients with hemangiosarcoma.

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Conclusion: In conclusion, it can be said that during the analysis, the average number of patients with soft tissue sarcomas of the neck and hands was 53.2±0.2, and it was observed in more women (58%). This can be explained by the hormonal waves experienced by women during their life and by the high sensitivity of sarcomas to hormonal changes. In the histological analysis, more observation of fibrosarcoma in the arm and arm can be attributed to the fact that the arm and arm are more exposed to various external influences than other localizations. In addition, the most common histological morphology was fibrosarcoma, which was 39% in hands. This is because most of the hand and shoulder areas are prone to injury. In most patients, we can see that fibrosarcomas are caused by various influences from the fibrous tissue in the post-injury scar area.

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