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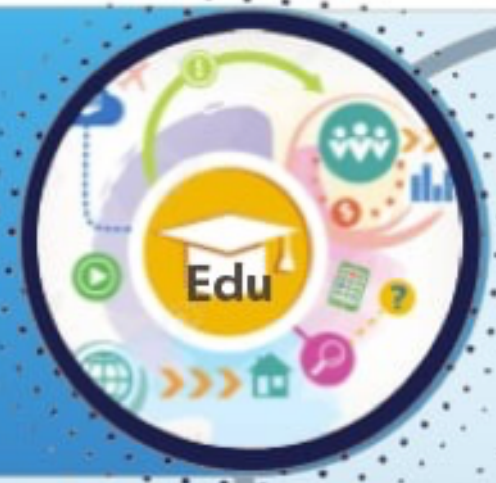

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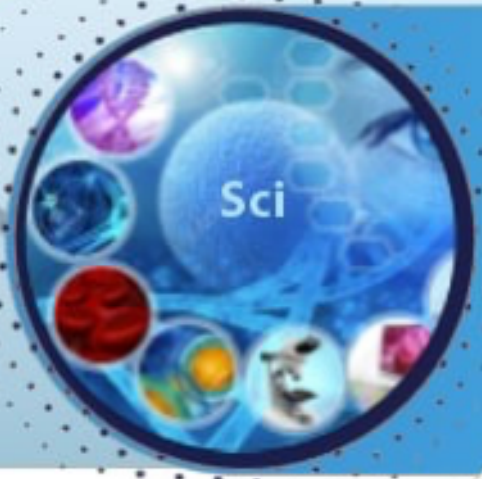

Issue 2 (2) | 2023

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ISSN: 2181-3175

Journal of Education & Scientific Medicine

ISSN 2181-3175

Tashkent Medical Academy

Research Article

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The Importance of the Prehospital Stage for the Diagnosis and Treatment of Diabetic Foot Syndrome

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ABSTRACT

Background. The rapid course of diabetes mellitus, the rapid progression of its complications, and the high percentage of amputations of the lower extremities make diabetic foot syndrome the most important medical and socio-economic problem. All the above allows us to consider the problems considered in this study to be very relevant for clinical medicine.
Material. We examined 255 patients with type 1 and type 2 diabetes mellitus (22 (8.6%) and 233 (91.4%) patients, respectively), the duration of which ranged from 5 to 25 years. Among the patients, there were 58 (22.7%) men and 197 (77.3%) women, their average age was 59.3 years.
Conclusion. The application of the proposed algorithm for diagnosing diabetic foot syndrome at the outpatient level will reduce the number of amputations of the lower extremities, reduce the number of validations and the high mortality of patients. The use of alpha-lipoic acid preparations is more appropriate in the earlier stages of the development of diabetic neuropathy when reversible processes in the nerves are still possible.

Keywords: diabetes mellitus, diabetic foot syndrome, diabetic neuropathy, before the in-hospital stage of diagnosis and treatment

INTRODUCTION

Diabetes mellitus is one of the most common diseases characterized by the development of severe complications leading to early disability and high mortality of patients.

One of the most formidable complications of diabetes mellitus is diabetic foot syndrome. Every fourth patient with diabetes mellitus is at risk of developing diabetic foot, and 6-15% of patients have foot ulcers at one stage or another of diabetes mellitus [1].

Currently, the percentage of unjustified amputations of the lower extremities remains quite large [2]. More recently, up to 60-80% of high amputations were performed in patients with diabetes mellitus who developed purulent-necrotic complications, although the process was limited to the area of the main phalanx or other local lesions [3].

According to the literature, more than half of patients with diabetes mellitus who have undergone amputation of the lower limbs die within the first two years [4]. If amputations are performed at the level of the upper third of the thigh, then the mortality rate will rise to 80% after 5 years [5]. Much has been achieved in the treatment and diagnosis of diabetic foot syndrome. But at present, issues such as early diagnosis and treatment of diabetic

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foot syndrome at the outpatient level have not yet been sufficiently studied. In this regard, the main thing in preventing the development of ulcerative-necrotic defects of the feet and amputations of the lower extremities in patients with sugar Diabetes is the development of a set of sequential measures aimed at early diagnosis and timely treatment of diabetic foot syndrome at the prehospital stage.

Thus, the severe course of diabetes mellitus, the rapid progression of its complications, and a high percentage of amputations of the lower extremities make diabetic foot syndrome the most important medical and socio-economic problem. All the above allows us to consider the problems considered in this study to be very relevant for clinical medicine.

MATERIAL AND METHODS

We examined 255 patients with type 1 and type 2 diabetes mellitus (22 (8.6%) and 233 (91.4%) patients, respectively), the duration of which ranged from 5 to 25 years. Among the patients, there were 58 (22.7%) men and 197 (77.3%) women, their average age was 59.3 years. We needed to assess the state of their peripheral innervation, the main blood supply to the lower extremities in these data patients and identify among them a risk group for developing diabetic foot syndrome. Clinical observation covered 120 patients with diabetic foot syndrome who were examined and treated in the multidisciplinary clinic of the Tashkent Medical Academy for the period 2020-20 22 years.

Of the 120 patients, including 43 (35.8%) men and 77 (64.2%) women, 12 (10%) people suffered from type 1 diabetes mellitus, and 108 (90%) suffered from type 2 diabetes mellitus. 74 (61.7%) patients had moderate diabetes mellitus, and 108 (90%) had severe diabetes mellitus. The age of the patients ranged from 26 to 80 years (average 64 years). Most patients (78.4%) had a diabetic history of more than 15 years.

The duration of diabetes mellitus before the onset of diabetic foot syndrome in most patients was 15 years or more. The first clinical manifestations of diabetic neuropathy in 72% of cases were observed 8-9 years after the onset of diabetes mellitus, and the destruction of the soft tissues of the foot in the form of an ulcer appeared after 12 years. In 64% of patients with the neuroischemic form of diabetic foot syndrome, morphological signs of diabetic foot syndrome arose in the first 5 years of the existence of diabetes mellitus and in the same period, in 52.4% of cases, patients developed ulcerative defects of the feet.

All patients underwent an examination (glycemic profile, creatinine, fibrinogen, total cholesterol, triglycerides, cholesterol ratio, as well as urinalysis, ECG, and chest X-ray). The degree of compensation of carbohydrate metabolism was judged by HbA1C.

Clinical and instrumental research methods were used to assess the state of the peripheral nervous system. When interviewing the patient, the nature of the complaints was clarified. Vibration, pain, tactile, and temperature sensitivity were investigated using a graduated tuning fork with a frequency of 128 Hz.

The clinical form of diabetic foot syndrome was exhibited based on a set of clinical examination data and the classification proposed at the 1st International Symposium on Diabetic Foot (Netherlands, 1991) was used. When determining the stage of the depth of damage to the tissues of the foot, they were guided by the Wagner classification: 0 tbsp - the absence of ulcer defects, the presence of cracks, hyperkeratosis, dryness, maceration of the skin; Grade 1 - superficial uninfected ulcerative defects; Grade 2 - deep ulcerative defects without bone involvement; Z degree - deep ulcerative defects involving bone, abscessing; 4 tbsp- local gangrene; Grade 5 - gangrene of the entire foot. Statistical processing of the material was carried out by the method of variation statistics. Differences between the study groups calculated according to the Student's t-test were found to be valid at $p<0.01$, $p<0.05$ or $p<0.001$.

RESULTS AND DISCUSSION

Insulin therapy was received by 34 (28.3%) patients, and oral hypoglycemic drugs from the group of sulfonylureas and biguanides were received by 86 (71.7%) patients. 98 (81.7%) patients had concomitant diseases. The most common were hypertension, coronary heart disease, and chronic cerebrovascular insufficiency.

In accordance with the objectives of the study, all patients were divided into 2 clinical groups: group 1 - patients with diabetic foot syndrome without ulcerative foot defects, and group 2 – patients with diabetic foot syndrome with ulcerative defects.

During the screening aimed at identifying patients with diabetes mellitus at risk of developing diabetic foot syndrome, 145 (56.9%) patients out of 255 had a significant decrease in the threshold of vibration sensitivity, and 91 (35.7%) showed a decrease or absence of tactile sensitivity. Violation of pain and temperature sensitivity was found in 70 (27.5%) patients.

Violation of peripheral blood supply in the arteries of the feet and legs was noted much less frequently, accord-

ing to our observations, in approximately 9.8% of cases. Of the 255 patients, we performed electromyography and ultrasound examination of the state of peripheral blood flow of the lower extremities in 65 patients who, during clinical examination, revealed impaired sensorimotor sensitivity and blood supply to the lower extremities. In 53 (81.5%) there was a significant decrease in the rate of excitation through the motor and sensory nerves. Doppler sonography in 8 (12.3%) out of 65 patients showed a decrease in the average blood flow velocity to 0.96 cm/s (at a rate of 1.6 cm/s). In addition, in 64% of cases, patients had various skin lesions on the feet. Thus, according to this survey, out of 255 patients with diabetes mellitus, we identified 113 (44.3%) patients who were at risk of developing diabetic foot, 47 (18.4%) of them had low, 36 (14.1%) had moderate, 22 (8.7%) had a high risk of developing this disease, which made it possible to start appropriate treatment and monitoring of this category of patients in a timely manner [6].

In our opinion, patients with type I diabetes mellitus who have a disease duration of more than 7 years, as well as all patients with type II diabetes mellitus from the moment of its detection, should be subject to annual examination to identify the risk group for developing diabetic foot syndrome.

The main subjective manifestations of dysfunction of the peripheral nervous system in the patients with diabetic foot syndrome examined by us were constantly aching pain of varying intensity in the fingers and soles, a feeling of numbness, and convulsions. When examining the foot of patients, the following changes were noted: deformation of the nails - 31%, mycosis of the interdigital spaces - 23%, dry skin - 51.1%, skin cracks - 31.8%, hyperkeratosis - 33.3%, deformation stop - 48.3%, ingrown toenail - 39.7%. Violation of vibration sensitivity was observed in 78% of cases, temperature and tactile - in 52% and 43% of cases, respectively. In many patients, the degree of sensory impairment was more than 5 points.

Patients had a predominantly moderate and pronounced degree of sensorimotor sensitivity impairment. Pronounced changes were characteristic of patients with a neuropathic form of diabetic foot (>5 points), and moderate - for patients with pathology of peripheral blood supply to the lower extremities (from 2 to 4 points). In 89% of the patients examined by us, electromyography revealed changes characteristic of polyneuropathy (decrease in amplitude, slowing of motor or sensory responses, decrease in the rate of propagation of excitation, increase in latent time) period [7].

In many patients with a neuropathic form of diabetic foot syndrome (26 patients from I and 36 from II clinical groups), there was a significant decrease in the rate of excitation along the motor and sensory nerves, a decrease in terminal latency (ms), and the amplitude of the M-response (mv).

In 89% of the patients examined by us, electromyography revealed changes characteristic of gross changes in diabetic polyneuropathy.

An analysis of the complaints showed that the clinical picture of ischemia of the lower extremities in many patients with diabetes mellitus is not typical. In most cases, in patients with diabetic foot syndrome, intermittent claudication and "koya pain" in the affected limb are either absent or mild. Only in 12% of cases, the clinic of ischemia of the lower extremities had a typical picture. Variants of clinical manifestations of arterial Insufficiency of the lower extremities can be explained, apparently, by the presence of concomitant diabetic neuropathy in most patients with diabetes mellitus. Palpation examination of pulsation of the arteries of the lower extremities gave the following results: pulsation on the dorsal artery of the foot was not determined in 24 (20%) patients out of 120 patients, it was reduced in 34 (28.3%) patients [9].

Pulsation on the posterior tibial and popliteal arteries was not detected in 16 (13.3%) and 16 (13.3%) patients out of 120, respectively. Femoral artery pulsation was not detected in 9 (7.5%) patients, was reduced in 34 (28.3%) patients. The data obtained by Doppler sonography and Doppler indicate a significant decrease in the determined parameters in the affected limb during occlusion of the vessels of the lower limb.

According to Doppler ultrasound, lesions of the arteries distal to the popliteal arteries occurred in 43 (76.8%) out of 56 patients. Of these, in 39 patients (69.6%), blood flow through the anterior and posterior tibial arteries was reduced, and in 11 (19.6%) patients it was not determined. In these patients, collateral blood flow was recorded.

In 7 (12.5%) of 56 patients with ischemia of the lower extremities, we found falsely elevated numbers of the ankle-brachial index. In the presence of ischemic pain at rest (III degrees of ischemia), the ankle-brachial index in 3 patients corresponded to 0.79-0.8 (at a rate of 1), and in 4 patients with stage II ischemia, the ankle-brachial index was in the range of 0.95-0.9. These examples confirm the possibility of unreliable information content ankle-brachial index in patients with diabetes mellitus. This is probably due to the presence in a number of patients with diabetes mellitus of the development of calcification

of the middle layer of the arteries, which, when applied to the cuff of the tonometer, reduces the ability of the artery to compress. The stage of ischemia according to Pokrovsky was detected in 18 (32.2%) patients, II in 20 (35.7%), stage III in 18 (32.2 %).

Unfortunately, until now, the surgical aspect of diabetic foot syndrome is considered mainly only when patients have purulent-necrotic lesions of the feet, which require long-term treatment, mainly in stationary conditions. Therefore, in addition to patients with destructive changes in the feet, we purposefully included in the study a group of patients who did not have ulcerative defects, but already had severe diabetic neuropathy and pathology peripheral blood supply to the lower extremities, as well as various changes in the skin of the feet.

A reliable demonstration of the effectiveness of treatment and observation of patients in the first clinical group was the normalization of glycemia, the absence of progression of ischemia and sensorimotor disorders, the absence of destructive changes in the feet or the maximum reduction in their number, as well as a decrease in the number of recurrences of ulcerative defects [12]. In addition to the above treatment, we at least 1 time in 3 months conducted regular examinations of the feet of patients, taught patients the proper care of nails and skin of the feet, and the selection of shoes. Mycosis of the feet and nails, skin cracks were treated, hyperkeratosis was excised, and the foot was unloaded with the help of insoles, orthoses, and protective shoes.

When analyzing the immediate results of treatment of patients with a neuropathic form of diabetic foot syndrome without destructive changes in the feet, it turned out that the best results took place in those groups where alpha-lipoic acid preparations were used. This was expressed in a decrease in pain, an improvement in sensitivity and an increase in the rate of excitation through the sensory and motor nerves.

In 8 (80%) patients with moderate diabetic neuropathy out of 10 treated with alpha-lipoic acid, the rate of excitation along the sensory and motor nerves increased by 2.1 m/s and 0.6 m/seq, respectively. In the control group, the analysis of electromyography did not reveal significant differences compared to the baseline.

In 9 (50%) of 18 patients with severe diabetic neuropathy, there was no significant increase in the rate of excitation along the motor and sensory nerves. The results obtained are apparently associated with the presence of severe diabetic neuropathy in these patients, which led to the development of profound structural changes in the peripheral nervous system. These results confirm the feasibility of prescribing alpha-lipoic acid in the early stages of the development of diabetic neuropathy when reversible processes in the nerves are still possible.

In the main group of patients with a neuropathic form of diabetic foot syndrome, foot ulcers formed in 1 (3.6%) out of 28 patients as a result of compression of the foot with narrow shoes. High amputation was performed in a 68-year-old patient who, 9 days after the development of large-focal myocardial infarction, had acute thrombosis of the deep femoral artery. The recurrence of ulcerative defects in this clinical group was not observed.

In the control group, ulcers were formed in 5 (17.8%) out of 28 patients. Two of them developed gangrene of the fingers, as a result of which their amputation was performed. Occlusion of the "terminal artery" on the foot in these patients developed with an abscess of the plantar space of the foot. The reason for the development of local gangrene in two patients was damage to the skin of the foot. Recurrences of ulcerative defects were subsequently observed in two patients from this group.

We also analyzed the results of the treatment of 28 patients with the neuroischemic form of diabetic foot syndrome in the presence of stage II ischemia, which included alpha-lipoic acid preparations and 28 patients who underwent only traditional therapy. It turned out that in patients of the main group in 82% of cases, there were better treatment results than in the control group. Before All this manifested itself in a decrease in neurological symptoms.

When assessing the distance without pain walking in patients of the main group, there was a significant increase in this parameter by 30% from the baseline (150 meters before treatment, 207 meters after treatment). In the control group, this indicator increased by 22% (140 meters before treatment, 173 meters after treatment). We associated an increase in the distance without painful walking with an improvement in the rheological properties of blood, microcirculation, as well as metabolic processes in the tissues of the lower extremities.

At the same time, in 4 (22.2%) of 18 patients with stage II b ischemia during treatment with alpha-lipoic acid, the clinical picture acquired a different character, which manifested itself in a decrease in the distance without painful walking. If before the start of treatment with alpha-lipoic acid preparations, these four patients could, without stopping, walk 160-170 meters, then after the therapy, the distance without painful walking decreased and was equal to 90-110 Metres away. This fact was not associated with the progression of ischemia,

which was confirmed by the data of an instrumental study. 2-3 months after the end of therapy, the distance travelled without pain increased again in these patients. This fact is probably a consequence of the regression of the clinical manifestations of diabetic neuropathy, which masked the symptoms of the corresponding stage of vascular ischemia of the lower extremities in patients with diabetic foot syndrome. It is important to note that the misinterpretation of the clinical manifestations of arterial insufficiency in patients with diabetes mellitus, if they have concomitant neuropathy, often leads to diagnostic errors and to the wrong choice of treatment tactics.

CONCLUSION

The main clinical manifestations of diabetic foot syndrome are diabetic neuropathy and ischemia of the vessels of the lower extremities. Screening allows you to identify patients with diabetes mellitus who are at risk of developing diabetic foot syndrome and determine their risk of this disease. Diabetic neuropathy masks the clinical manifestations of lower limb ischemia, the misinterpretation of which can lead to diagnostic errors at the prehospital stage.

Ethics approval and consent to participate - All patients gave written informed consent to participate in the study.

Consent for publication - The study is valid, and recognition by the organization is not required. The author agrees to open the publication

Availability of data and material - Available

Competing interests - No

Financing – Self

REFERENCES

1. Abdurakhmanov , F. M. . (2022). Impact of COVID-19 on the course of diabetic foot syndrome. Journal of Education and scientific medicine, (2), 5-8. Retrieved from https://journals.tma.uz/index.php/jesm/article/view/259

2. Abdurakhmanov, F. (2022). Features of diagnosing the treatment of diabetic foot syndrome. Journal of education and scientific medicine, 1(3), 21-26. Retrieved from https://journals.tma.uz/index.php/jesm/article/view/321

3. Bobokulova, S., & Okhunov, A. (2022). Acute purulent-destructive lung diseases as consequences of endotheliitis after COVID-19. Journal of Education and scientific medicine, 2(3), 56-61. Retrieved from https://journals.tma.uz/index.php/jesm/article/view/360

4. Intestinal peptides and their main role in the pathogenesis of type 2 diabetes mellitus / P. Azizova, Sh. Razzakov, et all. // Journal of Education and scientific medicine, 2022, 2(3), 95-100. Retrieved from https://journals.tma.uz/index.php/jesm/article/view/362

5. Korikhonov D., Boboev K., Abdurakhmanov F. Necrotizing fasciitis: difficulties on the way to diagnosing tactics. Journal of Education and Scientific Medicine, 2023, 2(1), P. 28-34. Retrieved from https://journals.tma.uz/index.php/jesm/article/view/389

6. Morphological aspects of wounds in patients with purulent inflammation of soft tissues in diabetes mellitus and under the influence of granulocyte-colony-stimulating factor / U.I. Pulatov, R.I. Israilov, A.O. Okhunov et all. // Journal of Education and scientific medicine, 2022, 2(3), 43-50. Retrieved from https://journals.tma.uz/index.php/jesm/article/view/363

7. New approaches to improve autodermaplasty results / F.M. Abdurakhmanov, Sh.A. Khamdamov, D. Korikhonov, et all. // Journal of Education and Scientific Medicine, 2(1), P. 22-27. Retrieved from https://journals.tma.uz/index.php/jesm/article/view/387

8. Okhunov A., et all. Morphological Characteristics of Intestinal Vessels of Animals with an Experimental Model of Diabetes Mellitus Type 2 Complicated by Microangiopathy. Indian Journal of Forensic Medicine & Toxicology 14.4 (2020): P. 7348-7353.

9. Okhunov A.O. Prediction and prevention of sepsis in patients with necrotizing fasciitis on the background of diabetes mellitus // 42-Annual Meeting of the Surgical Infection Society, Westlake Village, CA, 2023, April 11-14, P.39.

10. Okhunov A.O., Abduralhmanov F.M. Prolonged intraarterial catheter therapy for diabetic gangrene of the lower limb // 42-Annual Meeting of the Surgical Infection Society, Westlake Village, CA April 11-14, 2023 – P.38

11. Okhunov, A. O., B. D. Babadzhanov, and U. I. Pulatov. "The reasons for the generalization of infection in patients with purulent-inflammatory diseases of soft tissues against the background of diabetes mellitus." Bulletin of the Tashkent Medical Academy 4 (2016): 89-93.

12. Okhunov, A. O., et al. "Modern principals of antibacterial therapy of suppurative-septic diseases." Likars' ka sprava 7 (2003): 70-73.

13. Okhunov, A. O., U. I. Pulatov, and D. A. Okhunova. "A case of a clinical course of a purulent-inflammatory disease of soft tissues against the background of diabetes mellitus." European research: innovation in sci-

ence, education and technology London, United Kingdom (2018): 19-22.

14. Okhunov, A. O., U. I. Pulatov, and D. A. Okhunova. "An innovative look at the pathogenesis of surgical sepsis. Results of fundamental research." LAP LAMBERT Academic Publishing RU (2018): 145.

15. Okhunov, Alisher, et al. "Morphological Characteristics of Intestinal Vessels of Animals with an Experimental Model of Diabetes Mellitus Type 2 Complicated by Microangiopathy." Indian Journal of Forensic Medicine & Toxicology 14.4 (2020): 7348-7353.

16. Okhunov, Alisher Oripovich, Soyib Jonibekovich Bozaripov, and Oybek Tokhirovich Sattarov. "The condition of the endothelial system under nephropathy genesis." European Science Review 11-12 (2016): 84-88.

17. Pasvolsky O, Shimony S, Ram R, Shimoni A, Shargian L, Avni B, Wolach O, Shochat T, Yerushalmi R, Amit O, Raanani P, Yeshurun M. Allogeneic hematopoietic cell transplantation for acute myeloid leukaemia in first complete remission after 5-azacitidine and venetoclax: a multicenter retrospective study. Ann Hematol. 2022 Feb;101(2):379-387.

18. Pollyea DA, Winters A, McMahon C, Schwartz M, Jordan CT, Rabinovitch R, Abbott D, Smith CA, Gutman JA. Venetoclax and azacitidine followed by allogeneic transplant results in excellent outcomes and may improve outcomes versus maintenance therapy among newly diagnosed AML patients older than 60. Bone Marrow Transplant. 2022 Feb;57(2):160-166. doi 10.1038/s41409-021-01476-7. Epub 2021 Oct 13. PMID: 34645926.

19. Pulatov, U., Israilov, R., Okhunov, A., Abdurakhmanov, F., & Boboev, K. (2022). Morphological aspects of wounds in patients with purulent inflammation of soft tissues in diabetes mellitus and under the influence of granulocyte- colony-stimulating factor. Journal of education and scientific medicine, 2(3), 43-50. Retrieved from https://journals.tma.uz/index.php/jesm/article/view/363

20. Shadmanov A.K., Okhunov A.O., Abdurakhmanov F. M. Morphological characteristics of a new experimental model of chronic renal failure in the background of diabetic nephropathy. Journal of Education and scientific medicine, 2022, 2(3), 68-76. Retrieved from https://journals.tma.uz/index.php/jesm/article/view/364

21. Shadmanov, A., & Okhunov, A. (2023). Translational medicine: a new way from the experimental laboratory to clinical practice. Journal of Education and scientific medicine, (1), 2-7. Retrieved from https://journals.tma.uz/index.php/jesm/article/view/282

22. Shadmanov, A., Okhunov, A., & Abdurakhmanov, F. M. (2022). Morphological characteristics of a new experimental model of chronic renal failure in the background of diabetic nephropathy. Journal of education and scientific medicine, 2(3), 68-76. Retrieved from https://journals.tma.uz/index.php/jesm/article/view/364

How to Cite: *Abdurakhmanov F.M. The importance of the prehospital stage for the diagnosis and treatment of diabetic foot syndrome // JESM 2023. Volume 2, Issue 2, P. 65-71*

DIABETIK OYOQ SINDROMINI TASHXISLASH VA DAVOLASH UCHUN PREHOSPITAL BOSQICHNING AHAMIYATI

Abduraxmanov F. M.
Toshkent tibbiyot akademiyasi

ABSTRAKT

Dolzarbligi. Qandli diabetning asoratlarining tez rivojlanishi, oyoqlar yuqori amputatsiyalarining yuqori foizi diabetik oyoq sindromini eng muhim tibbiy va ijtimoiy-iqtisodiy muammoga aylantiradi. Yuqoridagilarning barchasi ushbu tadqiqotda ko'rib chiqilgan muammolarni klinik tibbiyot uchun juda dolzarb deb hisoblash imkonini beradi.

Material. 1-tip va 2-tip qandli diabet bilan og'rigan 255 nafar bemorni 22 ta (8,6%) va 233 ta (91,4%) bemorni tekshirdik, mos ravishda), uning davomiyligi 5 yildan 25 yilgacha bo'lgan. Bemorlar orasida 58 (22,7%) erkaklar va 197 (77,3%) ayollar bo'lgan, ularning o'rtacha yoshi 59,3 yoshni tashkil etgan.

Xulosa. Diabetik oyoq sindromini tashxislash bo'yicha taklif qilingan algoritmning tashxis darajasida qo'llanilishi pastki ekstremitalarning amputatsiya sonini kamaytiradi, validatsiyalar sonini va bemorlarning yuqori o'limini kamaytiradi. Alfa-lipoik kislota preparatlaridan foydalanish diabetik neyropatiya rivojlanishining avvalgi bosqichlarida, nervlardagi o'tkazuvchan jarayonlar hali ham mumkin bo'lganda yanada mos keladi.

Tayanch iboralar: Diabet, diabetik oyoq sindromi, diabetik neyropatiya, diagnostika va davolashning kasalxonada bosqichi oldidan

ЗНАЧЕНИЕ ДОГОСПИТАЛЬНОГО ЭТАПА ДЛЯ ДИАГНОСТИКИ И ЛЕЧЕНИЯ СИНДРОМА ДИАБЕТИЧЕСКОЙ СТОПЫ

Абдурахманов Ф.М.
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АБСТРАКТ

Актуальность. Тяжелое течение сахарного диабета, быстрое прогрессирование его осложнений, высокий процент ампутаций нижних конечностей делают синдром диабетической стопы важнейшей медицинской и социально-экономической проблемой. Все вышеизложенное позволяет считать рассматриваемые в данном исследовании проблемы весьма актуальными для клинической медицины.

Материал. Нами обследовано произвольно взятых 255 больных сахарным диабетом 1 и 2 типа (соответственно 22 (8,6%) и 233 (91,4%) пациента), длительность которого составляла от 5 до 25 лет. Среди больных было 58 (22,7%) мужчин и 197 (77,3%) женщин, средний возраст их равнялся 59,3 года.

Заключение. Применение предложенного алгоритма диагностики синдрома диабетической стопы на амбулаторно-поликлиническом уровне позволит сократить число ампутаций нижних конечностей, уменьшить число инвалидизаций и высокой смертности больных. Применение препаратов альфа-липоевой кислоты более целесообразно на более ранних стадиях развития диабетической нейропатии, когда возможны ещё обратимые процессы в нервах.

Ключевые слова: Сахарный диабет, синдром диабетической стопы, диабетическая невропатия, до госпитального этапа диагностики и лечения