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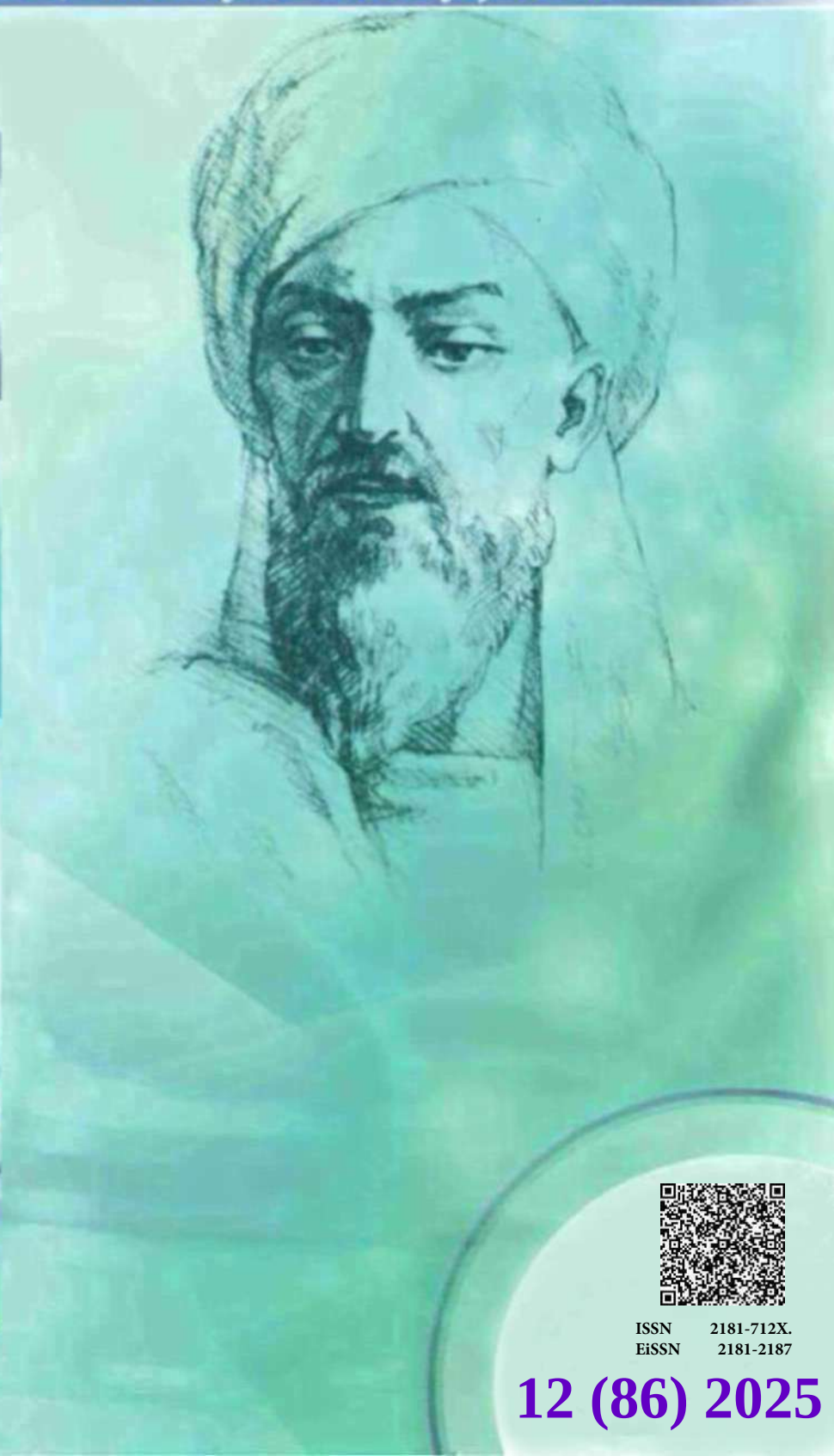


TIBBIYOTDA YANGI KUN

Ilmiy referativ, marifiy-ma'naviy jurnal



AVICENNA-MED.UZ



ISSN 2181-712X.
EISSN 2181-2187

12 (86) 2025

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ТИББИЁТДА ЯНГИ КУН НОВЫЙ ДЕНЬ В МЕДИЦИНЕ NEW DAY IN MEDICINE

*Илмий-рефератив, маънавий-маърифий журнал
Научно-реферативный,
духовно-просветительский журнал*

УЧРЕДИТЕЛИ:

**БУХАРСКИЙ ГОСУДАРСТВЕННЫЙ
МЕДИЦИНСКИЙ ИНСТИТУТ
ООО «ТИББИЁТДА ЯНГИ КУН»**

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А.В. Вишневского является генеральным
научно-практическим
консультантом редакции

Журнал был включен в список журнальных
изданий, рецензируемых Высшей
Аттестационной Комиссией
Республики Узбекистан
(Протокол № 201/03 от 30.12.2013 г.)

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12 (86)

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2025
декабрь

Received: 20.11.2025, Accepted: 06.12.2025, Published: 10.12.2025

UDK 616.711.23

METHODS OF CLINICAL STUDIES OF STATIC DEFORMITIES OF THE HUMAN LEG

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✓ Resume

The following methods are used to determine the methods of clinical investigation of static deformity of human legs: clinical method, podometry, plantography, radiography, pedography, computed tomography. The static deformity of the patient's foot also spreads along the dorsal cutaneous nerve due to pain pressure. The method of clinical research is to study the pressure exerted on the joints of the patient's foot.

Keywords: clinical research method, podometry, plantography, radiography, pedography, computed tomography.

МЕТОДЫ КЛИНИЧЕСКИХ ИССЛЕДОВАНИЙ СТАТИЧЕСКИХ ДЕФОРМАЦИЙ НОГИ ЧЕЛОВЕКА

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✓ Резюме

Для определения методов клинического исследования статической деформации ног человека используются следующие методы: клинический метод, подометрия, плантография, рентгенография, педография, компьютерная томография. Статическая деформация стопы пациента также распространяется по дорсальному кожному нерву из-за болевого давления. Метод клинического исследования заключается в изучении давления, оказываемого на суставы стопы пациента.

Ключевые слова: клинический метод исследования, подометрия, плантография, рентгенография, педография, компьютерная том.

ИНСОН ОЁЎНИНГ СТАТИК ДЕФОРМАЦИЯЛАРИНИ КЛИНИК ТАДҚИҚОТ УСУЛЛАРИ

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✓ Резюме

Инсон оёқларнинг статик деформациясини клиник тадқиқот усуллари аниқлаш учун қуйидаги усуллар қўлланилади: клиник усул, подометрия, плантография, рентгенография, педография, компьютер томографияси. Беморларнинг оёқларини статик деформациясини оғриқ босим туфайли дорсал тери нерви бўйлаб ҳам тарқалади. Клиник тадқиқот усулида беморнинг оёқ бўғимларига тушадиган босимларни ўрганиш.

Калит сўзлар: клиник тадқиқот усули, подометрия, плантография, рентгенография, педография, компьютер томографияси.

Relevance

In this position, the hammer-like deformity of the fingers can be clearly assessed, unlike radiographs, which are not so easy to imagine. In addition, when photographing, other pathological deformities of the foot can be documented, such as hallux valgus or varus deviation of the posterior part of the foot, supination or pronation of the foot. The physical examination begins with the patient's standing position, as this increases the hallux valgus deviation of the first finger and other deformities. It is important to assess the position of the posterior and anterior parts of the foot. Squamosal deformity and tension of the gastrocnemius and soleus muscles can often aggravate stress and provoke pain in the forefoot. The clinical examination is carried out in stages. At the first stage, it is necessary to evaluate the shape of the equinus foot, supination and pronation of the foot, as well as the length of the Achilles tendon. Next, they begin to evaluate the first "ray": it is necessary to determine the volume of movements in the first metatarsophalangeal joint, the hallux valgus and the volume of movements in the interphalangeal joint. On examination, in addition to the deformities themselves, inflammatory processes, trophic disorders, corns and corns can be detected. In addition, it is necessary to pay attention to the elasticity of the forefoot [1.3.5.7.9.11.13.15.17]. At the third stage of the clinical examination, attention is paid to small "rays". The presence of corns on the plantar surface of the foot is determined. Palpation of the metatarsal heads reveals metatarsalgia. Thus, pain in the distal regions is an indication for Weil osteotomy, and pain in the proximal regions is an indication for BRT osteotomy. The volume of movements in the metatarsophalangeal joints is assessed. In patients with rather "thin" feet, it is possible to assess the level of location of the metatarsal heads in the sagittal plane by passive plantar flexion of the fingers. In case of hammer-like deformity of the fingers, it is necessary to evaluate the passive correction of the deformation. The relative length of the fingers is estimated. Hypermobility in the first metatarsal joint is also determined. When the foot is brought into a state of plantar flexion, the insufficiency of the long flexor tendons is emphasized. Podometry is a method of diagnosing a person's foot, which is currently performed using a device called a podometer. But if there is no such device, you can calculate the parameters using a regular ruler. The length of the foot and the height of the longitudinal arch are measured, and a podometric index, or Friedland index, is formed from these data. This method is convenient for diagnosing the initial degrees of flat feet.

Plantography is a method of obtaining foot prints, which makes it possible to judge its spring function. This is one of the most effective and affordable foot examination methods. The patient sits on a chair, a coloring agent is applied to the surface of his feet, then he stands on paper with both feet. A plantogram is obtained, on which points are marked that allow you to determine the calculated, angular and linear indicators. Pedography is a method of assessing the pressure distribution under the foot. With this method, a picture of the pressure distribution under different areas of the foot is obtained. Each static deformity of the foot has its own pattern of pressure distribution under the foot, which differs from the norm. Radiography, along with clinical examination, is the most common method of diagnosing static deformities of the foot and is performed in various projections. Radiography is used to accurately characterize the bony arches of the foot, the position, size and shape of the bones forming it, objective examination and dynamics of changes in the arch during treatment. The most informative projections are the straight or dorsoplantar, which is performed in a standing position, and the medial oblique (three-quarter projection). The most commonly used projection is a straight line, although it should not be the only method used for operational planning. The impact of workload on the results of standardized measurements is still a matter of debate. According to the results of the study, which assessed the impact of images taken with and without exercise, it was proved that images taken without exercise can be reliably used in preoperative planning and determining surgical treatment tactics, however, most authors recommend performing radiographs under load. During the evaluation of radiographs, the angle of the hallux valgus deviation of the first finger (HVA, norm $< 15^\circ$) and the interplatelet angle (M1M2, norm $< 9^\circ$) are measured. The distal angle of the metatarsal joint (PASA, norm $< 10^\circ$) is the angle between the articular surface of the head and the axis of the first metatarsal bone. In most cases, the PASA angle is normal, and the first metatarsophalangeal joint is in a state of subluxation. This is called a mismatched hallux valgus deformity of the first finger. In a small percentage, usually young patients, the joint is congruent and not in a subluxation. Congruent valgus deformity is less prone to progression than incongruent. Hallux valgus deformity in the interphalangeal joint of the first finger HVIA (hallux valgus interphalangeus angle) in an isolated form is quite rare and more often it is one of the components of the hallux valgus deformity of the first ray (total valgus deformity of the hallux). Correction of the HVIA angle through medial closed-angle osteotomy is described for the first time. Radiographs can also assess the ratio of the head of the first plus-nevus to the sesamoid bones, the magnitude of the medial elevation, and the presence of degenerative changes in the joints of the foot. X-ray angles are used to assess the severity of valgus deformity of the forefoot in preoperative planning, and to evaluate and compare the

postoperative results of various interventions. During foot X-ray, the correct placement of the patient for examination and the direction of the X-ray tube are extremely important. It has been proven that the manual method of evaluating foot radiographs is error-prone and time-consuming. The technical errors of measurement using computer programs are lower than those of the manual measurement method. Mathematical models made in appropriate computer programs allow surgeons to go to surgery with a detailed plan for its implementation [2.4.6.8.10.12.14.16.18].

Conclusion

The examination reveals not only static deformities, but also injuries, tumors, and inflammatory processes. When using CT with contrast, it is possible to visualize pathological processes in muscles, ligaments, tendons and blood vessels. Greater accuracy compared to conventional foot examination methods, helping surgeons plan surgical treatment for combined foot deformities.

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Entered 20.11.2025