

# БИОМЕДИЦИНА ВА АМАЛИЁТ ЖУРНАЛИ

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## DIAGNOSTIC VALUE OF ELASTOSONOGRAPHY IN CHOROIDDAL TUMORS

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### ANNOTATION

**Research Objective:** To conduct a comprehensive assessment of the diagnostic efficacy of compression sonoelastography in differential diagnosis of choroidal neoplasms. **Materials and Methods:** 17 patients with intraocular tumors were examined using modern instrumental techniques: ultrasound Doppler examination, B-scanning, elastosonography, and ophthalmoscopy utilizing the Samsung HS70A diagnostic complex. **Research Results** demonstrate the fundamental possibility of differentiating choroidal melanoma and hemangioma through elastometric parameter analysis. Characteristic features of structural and elastic tumor characteristics were established. **Conclusion:** Elastosonography represents a promising non-invasive diagnostic method for intraocular tumors with high visualization potential of their structural features.

**Keywords:** elastosonography, choroidal, melanoma, hemangioma, stiffness.

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**KO'Z XORIOIDEYASI O'SMALARIDA ELASTOSONOGRAFIYANING  
DIAGNOSTIK AHAMIYATI**

## ANNOTATSIYA

**Tadqiqot maqsadi:** xorioidal o'smalarni differensial tashxislashda kompression sonoelastografiyaning diagnostik samaradorligini kompleks baholash. **Materiallar va metodika:** 17 bemor ko'z ichi o'smalarida zamonaviy instrumental usullar: ultratovush doppler tekshiruvi, B-skanerlash, elastosonografiya va oftalmoskopiya Samsung HS70A diagnostika kompleksidan foydalangan holda o'tkazildi. **Tadqiqot natijalari** xorioidal melanoma va gemangiomaning elastometrik parametrlarni tahlil qilish orqali farqlash imkoniyatini ko'rsatadi. O'sma strukturasi va elastik xususiyatlarining xarakterli jihatlari aniqlandi. **Xulosa:** Elastosonografiya ko'z ichi o'smalarini noninvasiv diagnostikasida strukturaviy xususiyatlarini yuqori darajada vizualizatsiya qilish potentsialiga ega istiqbolli usul hisoblanadi.

**Kalit so'zlar:** elastosonografiya, xorioidal, melanoma, gemangioma, zichlik.

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## ДИАГНОСТИЧЕСКАЯ ЦЕННОСТЬ ЭЛАСТОСОНОГРАФИИ ПРИ ОПУХОЛЯХ ХОРИОИДЕИ

## АННОТАЦИЯ

**Цель исследования:** провести комплексную оценку диагностической эффективности компрессионной соноэластографии при дифференциальной диагностике новообразований хориоидеи. **Материалы и методика:** Обследовано 17 пациентов с внутриглазными опухолями. Применены современные инструментальные методики: ультразвуковое доплеровское исследование, В-сканирование, эластосонография и офтальмоскопия с использованием диагностического комплекса Samsung HS70A. **Результаты исследования** демонстрируют принципиальную возможность дифференциации хориоидальной меланомы и гемангиомы посредством анализа эластометрических параметров. Установлены характерные особенности структурных и эластических характеристик новообразований. **Заключение:** Эластосонография представляет перспективный неинвазивный метод диагностики внутриглазных опухолей с высоким потенциалом визуализации их структурных особенностей.

**Ключевые слова:** эластосонография, хориоидальная, меланома, гемангиома, жёсткость.

**Dolzarbligi.** Ko'ruv a'zosi o'smalari kam uchraydi, ammo ularni erta aniqlash bemorning prognozini yaxshilashga yordam beradi. Ko'z murakkab tuzilgan a'zo bo'lib, turli to'qimalardan tashkil topgan va ular o'smalarga sabab bo'lishi mumkin [1]. Xorioidal melanomaga doir dastlabki ma'lumotlar 1563-yilga (G. Bartisch) taalluqlidir. Xorioidea melanomasining kasallanish chastotasi geografik hududlarga qarab turlicha: masalan, Fransiyada bu o'sma 1 million kishiga 7 holatda aniqlangan bo'lsa, Markaziy Osiyoda ancha past 1 million aholiga 2 ta holat. Skandinaviya mamlakatlarida esa, aksincha, ko'rsatkich 1 million kishiga 10 taga yetgan [2, 3]. Xorioidal gemangioma yaxshi sifatli o'sma, biroq u hajm effekti hosil qilib, normal ko'rish jarayonini buzishi mumkin [4]. Kulrang shkalali ultratovush tekshiruvi qattiq o'smalarni differensial tashxislashda muhim usullardan biridir. Uning nazariy asosi shundan iboratki, turli o'sma to'qimalari tovush to'lqinlarini har xil darajada yutadi va qaytaradi, hattoki ba'zi hollarda maxsus belgilar kuzatilishi mumkin, masalan, xorioid melanomasiga xos bo'lgan "ekskavatsiya belgisi". Biroq klinik va akustik xususiyatlari tipik bo'lmagan ko'plab o'smalarda noto'g'ri tashxis qo'yilish ehtimoli yuqori bo'ladi. Kontrastli kuchaytirilgan ultratovush va elastosonografiya kabi yangi texnologiyalar turli tizimlarning o'smalarini aniqlashda qo'llanilmoqda va ularning diagnostikadagi ahamiyati ortib

bormoqda [5–7,14]. Elastosonografiya - bu to'qimalarning mexanik xususiyatlarini in vivo (tirik organizmda) aniqlash usuli bo'lib, uni 1991-yilda Ophir va hammualliflar taklif etgan [8]. Ushbu usul tekshirilayotgan to'qimaning elastikligini o'lchash va u yaxshi sifatli yoki yomon sifatli ekanligini taxmin qilish imkonini beradi [9,10]. Hozirda elastosonografiya asosan qalqonsimon bez va sut bezi kabi yuzaki yumshoq to'qimalarni kuzatishda qo'llaniladi [11,12]. Kompresion elastografiya yordamida baholash (yarim miqdoriy) va strain ratio cho'zilish nisbatini (miqdoriy) hisoblash amalga oshiriladi. Rang shkalasi usulidan farqli o'laroq, strain ratio aniqroq va obyektiv o'lchovlarni ta'minlaydi [13].

**Maqsad.** Xorioidal o'smalarni noinvavaziv tashxishlashda kompresion sonoelastografiya natijalari.

**Materiallar va usullar.** Ushbu tadqiqotga Toshkent shahar NDC- medic xususiy klinikasiga murojaat qilgan, ko'z ichi bo'shlig'ini egallovchi hosilaga ega 17 bemor (17 ko'z) tekshirildi. Bemorlarda Doppler ultrasonografiya, B-scan, elastosonografiya, oftalmoskopiya o'tkazildi. Qon oqimini baholash va elastosonografiya bajarishda B-scan UTT apparati (Samsung HS70A (SAMSUNG, Korea) qo'llanildi. 12.3 MHz chastotali yuzaki a'zolar zondi tanlandi va mexanik indeks <1 darajada saqlandi. Rangli Doppler ultrasonografiya, B-scan yordamida o'smaning joylashuvi, shakli o'lchami, chegaralari, ichki qon oqimi signali mavjudligi kuzatildi.

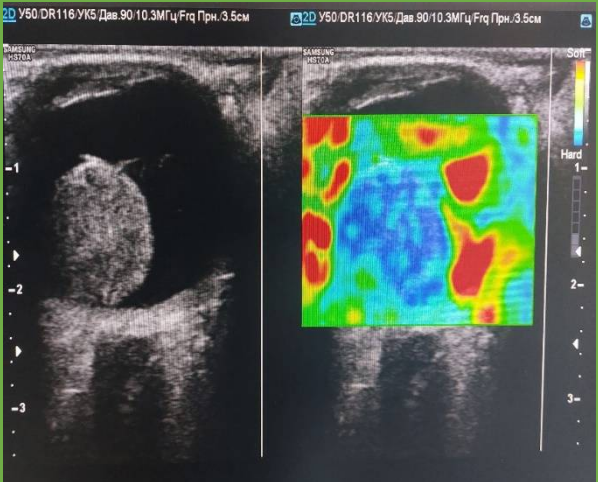
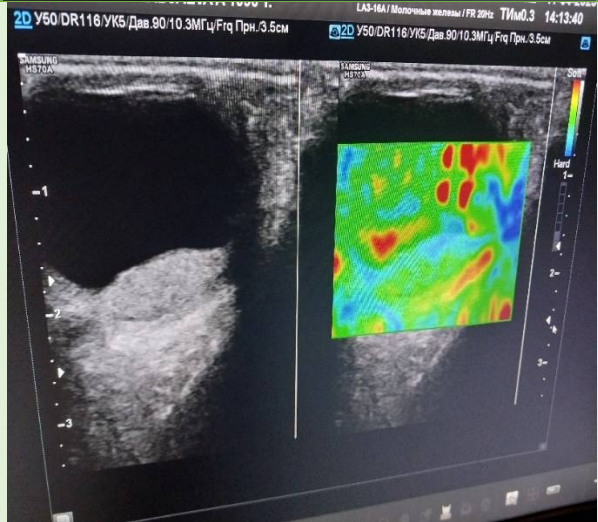
Elastosonografiya o'tkazish usuli: elastosonografiyada sut bezini tekshiriladigan rejimda 10.3 MHz chastotada mexanik indeksi <1 darajada saqlandi va yuzaki a'zolar zondida tekshirildi. Transduser o'sma yuzasiga perpendikulyar tutildi, o'sma ustiga yengil bosim ostida bir necha bor qo'llandi. Tasvir 3-5 soniya davomida to'qimalarning qattiqligini aniq aks ettirildi. Elastografiya rejimida to'qimalar zichligi rang shkalasida va (Strain ratio= Nazorat soha deformatsiyasi / O'choq deformatsiyasi) deformatsiya ko'rsatkichida ifodalanadi.

**Natijalar.** Ko'z ichida hosilasi mavjud bo'lgan jami 17 bemor (17 ko'z) tadqiqotga olindi. Ulardan 9 nafari erkak (9 ko'z) va 8 ayol (8 ko'z) bo'lib, yosh oralig'i 26 yoshdan 83 yoshgacha tashkil etdi. Bemorlarni 2 guruhga ajratildi: xorioidal melanoma 9 ko'z, xorioidal gemangioma 8 ko'z. Ultratovush tekshiruvida ko'z ichidagi o'smalarning nomoyon bo'lishi jadvalda 17 bemor (17 ko'z) ning rangli doppler, elastosonografiya va oftalmoskopiya tekshirilgan asosiy belgilari keltirilgan. Jadvalda ko'rishimiz mumkinki, xorioidal melanoma o'smalarining shakli xorioidal gemangioma o'smalarning shakliga nisbatan farqli ya'ni fungatsiyalashgan va notekis. Xorioidal melanomalarning hajmi ham kattaroq va balandroq mos ravishda (7.7- 28,0 mm ga nisbatan 2,3-13,3 mm), (8,5 – 33,5mm ga nisbatan 5,2-18,0 mm). Maxsus akustik belgilarda ekskavatsiya belgisi va Xorioidal "hollow" belgisi faqat xorioidal melanomada uchragan mos ravishda (66.7 % va 88.9% va 0 %). Oftalmoskopiya xorioidal melanoma va gemangiomada g'ilyalik mos ravishda 55.6% va 25% kuzatildi. Rangli Doppler rejimida qisman ko'rinuvchi qon oqimi faqat xorioidal melanomada va to'liq qon oqimi esa xorioidal gemangiomaga to'g'ri keldi. Keltirilgan elastografiyaning namunaviy rasmlarida ko'rib turibmizki xorioidal melanomalarning rang shkalasi yon yumshoq to'qimalarga (qizil, sariq) nisbatan moviy va ko'k rangda ko'ringan va ularning miqdoriy shkalasi 3 va 4 ni tashkil etgan. Xorioidea gemangiomasida esa aksincha yon yumshoq to'qimalarga nisbatan yashil rangda bo'lgan va miqdoriy shkalasi 2 ni tashkil etgan va shu asosda jadvalda deformatsiya ko'rsatkichi umumiy xorioidal melanoma o'smalarning 33,3 % moviy (3), qolgan 66,7 % ko'k (4) rangda qabul qilindi. Xorioidea gemangiomasida esa faqat 100% yashil (2) rangda akslandi.

**Muhokama.** Ushbu izlanishda xorioidal melanomasi va xorioidal gemangioma kabi ko'z ichi o'smalarini o'zaro differensial tashxis qilishda elastosonografiyada zichlik nisbatini (strain ratio) rolini o'rganishga qaratildi. Natijalardan ko'rinib turibdiki xorioidal ko'z ichi o'smalarning elastikligida sezilarli farqlar mavjud. Elastosonografiya orqali olingan natijalar xorioidal melanomasi va xorioidal gemangioma farqlashda muhim qo'shimcha tekshiruv usuli bo'lishi mumkin. Ularning klinik va oftalmoskopik ko'rinishlari boshqa kasalliklar bilan oson aralashib ketishi mumkin, ko'z nur o'tkazuvchi muhiti xiralashuvi ko'z tubini tekshirishni qiyinlashtirganda qo'l keladi. Bundan tashqari biopsiya murakkab va imkonsiz bo'ladi. Har bir ko'z kasalliklarida erta tashxislar va davo muolajalari bemorning ko'rish funksiyasini ma'lum darajada saqlash, va hatto hayotini ham saqlab qolishga yordam beradi. Ultratovush tekshiruvlari sohasida zamonaviy elastosonografiya mavjud

bo'lib ular qalqonsimon bez, sut bezi va boshqa yuzaki o'smalarning yaxshi va yomon sifatli xususiyatlarini farqlashda tobora keng qo'llanmoqda va tashxisning aniqligini oshiradi. Ushbu tadqiqotda 17 nafar ko'z ichi o'smalari bo'lgan bemorlar ishtirok etdi. Bemorlar ularning tasvirlariga va belgilariga asoslanib guruhlariga ajratildi. Ko'z ichi xorioidal melanomalari ko'proq g'ayrioddiy shaklga, kattaroq gorizontal diametr va vertikal diametrga ega bo'ladi va ularda "excavation sign", "choroidal hollow sign" kabi o'ziga xos belgilarni uchratish mumkin. Xorioidal melanomali o'smalar zichlik nisbati xorioidal gemangiomali o'smalarga nisbatan yuqoriroq bo'lib chiqdi. Bu shuni ko'rsatadiki, qalqonsimon bez va sut bezi saratonida kuzatilgan deformatsiya nisbatining oshishi ko'z ichi o'smalarida ham qo'llash mumkin.

2 guruhning har biriga oid namunaviy tasvirlarni ko'rsatadi.

<p>a) Xorioidea melanomasining elastosonografik tasviri. Chap ko'zning ichki 2/3 qismini egallagan aniq chegaralari bo'lgan shishasimon tanada qo'ziqorinsimon, geterogen qattiq o'sma ko'rinadi, "excavation sign" (+) aniqlangan. O'sma tanasi asosan ko'k rangda aks etgan. Tanlab olingan o'sma tanasining strain nisbati normal orbital to'qimaga (qizil, sariq rangda) nisbatan 4 deb o'lchangan.</p>	
<p>b) Xorioidea gemangiomasiining elastosonografik tasviri. Chap ko'zning ko'ruv nervi diskining qismida shishasimon tana ichida yarim shar shaklidagi yumshoq o'smalar aniq chegaralar bilan ko'rinadi; ichki akslari nisbatan gomogen va o'rtacha kuchli. O'sma tanasi yashil ranglarda tasvirlangan. Tanlab olingan o'sma tanasining strain nisbati normal orbital to'qimaga (qizil va sariq rangda) nisbatan 2 deb o'lchangan.</p>	

Belgilari	Umumiy (17 bemor), (17 ko'z)	Xorioidal melanoma (9 bemor), (9 ko'z)	Xorioidal gemangioma (8 bemor), (8 ko'z)
OD	6(35.3)	0	6(75)
OS	11(64.7)	9(100)	2(25)
<b>O'sma shakli, n (%):</b>			
Yarimsharsimon	8(47)	-	8(100)
Fungatsiyalashgan	9(53)	9(100)	-
Gorizontal diametri (mm)	-	7,7- 28	2,3- 13,3
Vertikal diametri (mm)	-	8,5- 33,5	5,2 – 18,0
<b>Maxsus akustik belgilar, n (%):</b>			
Ekskavatsiya belgisi	6(35.3)	6(66.7)	-

Xoroidal "hollow" belgisi	8(47)	8(88.9)	-
<b>Oftalmoskopiya, n (%):</b>			
G'ilyalik	7(41.2)	5(55.6)	2(25)
<b>Rangli Dopplerda qon oqimi, n (%):</b>			
Ko'rinadigan qon oqimi	9(53)	9(100)	-
To'liq qon oqimi	8(47)	-	8(100)
<b>Strain ratio (deformatsiya ko'rsatkichi), n (%):</b>			
2 (yashil) >50%	8(47)	-	8(100)
3 (moviy) >50 %	3(17.7)	3(33.3)	-
4 (ko'k) >50 %	6(35.3)	6(66.7)	-

**Xulosa.** Ushbu tadqiqotga asoslanib elastosonografiya yordamida ko'z ichi xoroidal o'smalarini bir-biridan farqlash mumkin. Shu sababli, kelajakda o'smalarni tashxislashda elastosonografiya muhim rol o'ynaydi.

### REFERENCES| CHOCKKI | IQTIBOSLAR:

1. Bornfeld N, Biewald E, Bauer S, Temming P, Lohmann D, Zeschnigk M. The interdisciplinary diagnosis and treatment of intraocular tumors. *Dtsch Arztebl Int.* 2018;115:106–11. doi: 10.3238/arztebl.2018.0106.
2. Keunen J., Bleeker I. Oogsparendw behandeling van het uveamelanoom//Ned. Tijdschr. Geneesk. — 1997. — Vol. 141, N 42. — P. 2005—2009.
3. Seregard S. Posterior uveal melanoma//Acta Ophthal. Scand. — 1996. - Vol. 74, N 4. - P. 315-329.
4. Shanmugam P.M, Ramanjulu R. Vascular tumors of the choroid and retina. *Indian J Ophthalmol.* 2015;63:133–40. doi: 10.4103/0301-4738.154387.
5. Madsen HH, Rasmussen F. Contrast-enhanced ultrasound in oncology. *Cancer Imaging.* 2011;11:S167–73. doi: 10.1102/1470-7330.2011.9042.
6. Beckmann S, Simanowski JH. Update in contrast-enhanced ultrasound. *Visc Med.* 2020;36:476–86. doi: 10.1159/000511352.
7. Mapes-Gonnella T. The emerging role of elastography in cancer:Diagnostic value in detecting and assessing therapeutic response to treatment. *J Doag Med Sonog.* 2014;30:11–7.
8. Ophir J, Cespedes I, Ponnekanti H, Yazdi Y, Li X. Elastography:A quantitative method for imaging the elasticity of biological tissues. *Ultrason Imaging.* 1991;13:111–34. doi: 10.1177/016173469101300201.
9. Cantisani V., Consorti F., Guerrisi A, Guerrisi I, Ricci P, Di Segni M, et al. Prospective comparative evaluation of quantitative-elastosonography (Q-elastography) and contrast-enhanced ultrasound for the evaluation of thyroid nodules:Preliminary experience. *Eur J Radiol.* 2013;82:1892–8. doi: 10.1016/j.ejrad.2013.07.005
10. Giusti M, Campomenosi C, Gay S, Massa B, Silvestri E, Monti E, et al. The use of semi-quantitative ultrasound elastosonography in combination with conventional ultrasonography and contrast-enhanced ultrasonography in the assessment of malignancy risk of thyroid nodules with indeterminate cytology. *Thyroid Res.* 2014;7:9. doi: 10.1186/s13044-014-0009-8.
11. Rizaev, J. A., Vohidov, E. R., & Nazarova, N. S. (2024). The importance of the clinical picture and development of the condition of periodont tissue diseases in pregnant women. *Central Asian Journal of Medicine*, 85–90.
12. Khazratov, A. I., Rizaev, J. A., & Ganiev, A. A. (2024). Epidemiological assessment of the incidence and mortality of oral cancer. *Eurasian Journal of Medical and Natural Sciences*, 4(12), 99–103.
13. Shakhonova, S. S., & Rakhimov, N. M. (2025). The role of troponin and IL-6 in immunological assessment of sarcopenia in oncological patients. *Central Asian Journal of Medical and Natural Science*, 6(3), 1229–1233.

14. Rizaev, J. A., Rahimov, N. M., & Kadirov, X. X. (2023). Oncoepidemiological assessment of the incidence and mortality of prostate cancer for the period 2015–2020 in the cross section of the Republic of Uzbekistan and individual regions. *Open Access Repository*, 4(3), 1108–1113.
15. Zhao CK, Xu HX. Ultrasound elastography of the thyroid: Principles and current status. *Ultrasonography*. 2019;38:106–24. doi: 10.14366/usg.18037.
16. Chang JM, Park IA, Lee SH, Kim WH, Bae MS, Koo HR, et al. Stiffness of tumours measured by shear-wave elastography correlated with subtypes of breast cancer. *Eur Radiol*. 2013;23:2450–8. doi: 10.1007/s00330-013-2866-2.
17. Sigrist RMS, Liao J, Kaffas AE, Chammas MC, Willmann JK. Ultrasound elastography: Review of techniques and clinical applications. *Theranostics*. 2017;7:1303–29. doi: 10.7150/thno.18650.
18. Tug'ma glaucoma 151 bet "TIBBIYOT NASHRIYOTI MATBAA UYI" nashriyoti Toshkent sh. Olmazor tumani, Shifokorlar, 21-uy

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