QALQONSIMON BEZ SARATONI ZAMONAVIY INSTRUMENTAL TASHXISLASH USULLARI

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ABSTRACT

Ushbu tadqiqot qalqonsimon bez saratonini instrumental tekshiruvlar orqali tashxislash va ularning samaradorligini baholashdan iborat. Bu yerda akademik Y.X.To'raqulov nomidagi RIEIAT markazida UTT, MRT va OFEKT/KT yordamida ularning qalqonsimon bez diagnostikasida tutgan o'rni, afzalliklari va kamchiliklari o'rganildi.

Tadqiqot maqsadi: qalqonsimon bez saratonida instrumental usullar orqali tashxislash usullari samaradorligini baxolash

Material uslublar: akademik Y.X. To'raqulov nomidagi RIEIATM da tugunli bo'qoq bilan murojaat qilgan bemorlarga jarroxlik amaliyotidan oldin ultratovush tekshiruvi (UTT), magnit rezonans tomografiya (MRT) va bir fotonli emission kompyuter tomogragiya (OFEKT/KT) tekshiruvlari o'tkazildi. Xar birining diagnostik ahamiyati baxolandi va xulosalar qayd etildi.

Natijalar va muxokama: UTT boshqa usullarga qaraganda tugunli qalqonsimon bez kasalligini baxolash uchun sezgir va oziga xosdir. UTT qalqonsimon bez va bo'yin limfa tugunlarida shubha bo'lgan barcha kasalliklarda yoki tasodifan aniqlangan tugunli xolatlarda o'tkazilishi shart.

KIRISH

Qalqonsimon bez tabaqalanuvchi saratoni global eng keng tarqalgan endokrin va bosh-bo'yin sohalaridagi saratonlardan biri bo'lib xisoblanadi. 1990-yillardan boshlab kasallikning tarqalish darajasi cheklangan diagnostika texnologiyalari sabablari Afrikadan tashqari butun dunyoda tez sur'atlar bilan o'sib bordi. Paes va boshq. 2010 yildagi taxlillari natijasida, qalqonsimon bez saratoni, boshqa saraton kasalliklari ichida tez suratlarda o'sib borayotganini aniqladilar (1). Saraton tadqiqotlari agentligidan (GLOBOCAN) 2018 yildagi ma'lumotlarga ko'ra, taxminan 567,200 yangi holatlar va 41,100 o'lim holatlarga (2)

qalqonsimon bez saratoni sabab bo'ladi. Osiyoda qalqonsimon bez saratoni bilan kasallanish darajasi ham ortib bormoqda. Osiyo saraton ro'yxatga olish reestrining 2018 yilgi holatiga ko'ra, sog'liqqa tahdid qilishi mumkin bo'lgan 3 yirik saraton kasalliklaridan biri bo'ldi. Ba'zi Osiyo davlatlarida (Xitoy, Qirg'iziston, Qozog'iston) qalqonsimon bez saratoni bilan kasallanish darajasi ayollarda (4) keskin yuqoriga ko'tarildi. Umummilliy malumotlarning olish uchun ma'lumot olish masalasi (5-7) qalqonsimon bez saraton kasalligi va o'lim holatlari haqida ma'lumot olishga to'g'ri keladi. Saraton bilan kasallanish darajasini aniqlashga AQSh Milliy reestri Osiyo davlatlari haqida bir ma'lumot taqdim etmaydi.

Qalqonsimon bez saratonining turlari

Qalqonsimon bez papillyar saratoni (QBPS), qalqonsimon bez follikulyar saratoni (QBFS), qalqonsimon bez anaplastik saratoni (QBAS) va medullyar qalqonsimon bez sartonlari (QBMS) farqlanadi (1). Qalqonsimon bez yuqori tabaqalanuvchi saratoniga – QBPS, QBFS va QBMS kiradi, kam va tabaqalanmaydigan turlarga QBAS kiradi. Yuqori tabaqalanuvchi qalqonsimon bez saratoni umumiy qalqonsimon bez saratonining tahminan 95% ni tashkil qilib (1), QBPS va QBFS boshqa turlarga qaraganda yaxshiroq prognozga ega. Qalqonsimon bez saratonini rivojlanishida radiatsiya, irsiyat va boshqa omillar o'rin egallaydi. QBS limfa tugunlariga limfa yo'llari orqali, suyak va boshqa a'zolarga gematogen – qon tomirlar orqali tarqaladi (2). QBMS qalqonsimon bezning parafollikulyar neyroendokrin hujayralaridan rivojlanadi va ko'pincha bo'yin limfa tugunlariga metastaz beradi (2). Qalqonsimon bez saratonining kichik tiplari va metastazning umumiy yo'llarining yo'nalishlari bo'yicha xatti-harakatlarini bilish diagnostika va davolash strategiyasining ajralmas qismidir.

Qalqonsimon bezni ultratovush tekshiruvi

• UTT tugunli qalqonsimon bez kasalligini baxolash uchun palpatsiyaga qaraganda sezgir va o'ziga xosdir (2,3).

• UTT qalqonsimon bez va buyin limfa tugunlarida shubha qilingan barcha kasalliklarda yoki tasodifan aniqlangan tugunli xolatlarda o'tkazilishi shart (3).

TIRADS ballari UTT da qalqonsimon bezdagi tugunlar, ularni ta'riflash va xavflilik darajasi aniqlash uchun ishlab chiqilgan, bunda kerak bo'lmagan biopsiya va sitologik tekshirishlarni oldini oladi. Shuningdek, butun dunyodagi shifokorlar fikrini bir erga jamlash, ularni o'zaro bir to'xtamga kelishlari va bemorlarga to'g'ri yordam ko'rsatishlari uchun qo'llaniladi. Buning uchun qalqonsimon bez tugunlarini UTT ga asoslangan xolda TIRADS tizimida 5 daraja ishlab chiqarilgan, ular natijasida qolgan qalqonsimon bezni sitologik tekshirishlarga o'z vaqtida yordam berishga xizmat qiladi. TIRADS tizimidagi 5 daraja QBPS tashxislashda ijobiy natijalar beradi, lekin QBFS va QBMS da qiyinchiliklarga duch keladi (4,5).

1-jadval: qalqonsimon bez tugunli kasalliklarida UTT ning xisobot ko'rsatkichlari.

Qalqonsimon bez toqimasi	▪ Exogenlik ▪ Hajmi (uch o'lchamda va maydoni) ▪ Qalqonsimon bez bo'yin qismining kengayishi yoki kichrayishi
Tugun	▪ Kattaligi (uch o'lcham va maydonda) ▪ Siqilish ▪ Exogenlik

	▪ Tarkibi ▪ Mavjud shubhali belgilar[1] ▪ Qalqonsimon bezdan tashqari kattalashish belgilari
Qaysi aloxida zararlangan soxalarni tavsiflash lozim?	▪ 10 mm dan katta bulgan tugunlar ▪ Shubxali 5-10 mm o'lchamdagi tugunlar
Qancha tugunlarni batafsil tavsiflash kerak?	▪ Tekshirish vaqtida tugunlar soni >3 bo'lsa, eng kattasi va shaxsiy belgilarga tegishli bo'lgan xolatlarni tavsiflash kerak[2]
Mavjud patologik limfa tugunlar	▪ Joylashuvi, uchta o'lchami, belgilari

1 – shubxali ultratovush belgilari: mikrokaltsifikatlar, noaniq va notesiks chegaralar, gipoehogenlik. Shubhali bo'lmagan ultratovush belgilari: ingichka Galo, makrokaltsifikatsiya.

2 – bemorlarga jarroxlik amaliyoti paytida sifatli yordam berilmoqda.

2-jadval: EU-TIRADS darajalariga qarab qalqonsimon bez xavfsiz tugunlarini aniqlash va ularni tegishli tartibida sitologik tekshiruvga yo'naltirish.

Kategoriya [1]	UTT xususiyatlari	Xavf-xatarlilik darajasi (%)	Jarrohlik amaliyotiga nisbatan kuzatilgan xavf darajasi	Sitologik tekshiruv[2]
EU-TIRADS 1 normal	tugunlar yo'q	-	-	yo'q
EU-TIRADS 2 xavfsiz	kista gubka ko'rinishida	0	1.4	yo'q
EU-TIRADS 3 past xavf	Izo/giperexogen yuqori xavf belgilari mavjud emas	2-4	3.5	>20 mm
EU-TIRADS 4 o'rta xavf	kam gipoexogen yuqori xavf belgilari mavjud emas	6-17	17	>15 mm
EU-TIRADS 5 yuqori xavf	Quyidagi belgilardan 1 mavjud bo'lsa: ▪ Noto'g'ri shakll ▪ Geterogen tarkib ▪ Mikrokaltsifikatsiya ▪ Yuqori gipoexogenlik	26-87	87.7	>10 мм[3]

1. Xavflilik darajasi soniga qarab, biz ushbu tugunlarni EU-TIRADS 4 deb tasniflashni taklif qilamiz.

2. Agar patologik limfa tugunlari mavjud bo'lsa yoki tugun qalqonsimon bezdan tashqariga o'sishiga shubxa bo'lsa, sitologik tekhiruv EU-TIRADS darajasidan qat'iy nazar barcha xolatlarda bajarilishi kerak.

3. 5-10 mm mahalliy kattalashgan limfatik tug'unlar mavjud bo'lgan xolatlarda yoki tugunlarni qalqonsimon bezdan tashqariga o'sish belgilari aniqlansa, sitologik tekshirishuv qilinishi kerak.

1-rasm: qalqonsimon bez saratoni UTT tekshiruvida.
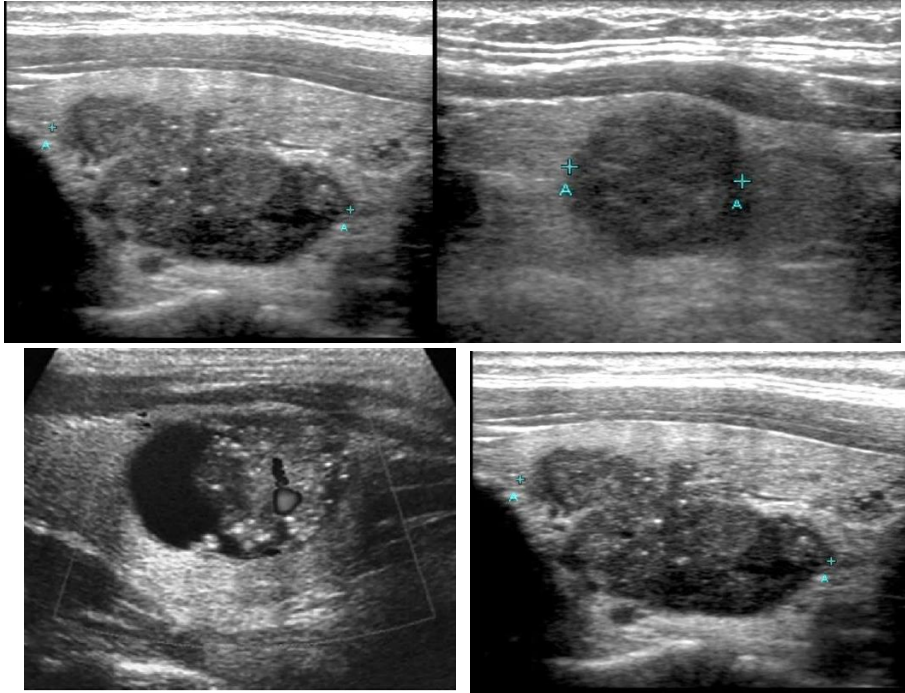
Aniq bir davolash tadbirlari amalga oshirilmaganda, tugunlarni nazorat qilish tartibi:

▪ Tugunlarni kattalashishini nazorat qilish (ikki o'lchamda ≥20% kattalashsa yoki qayta ko'rish vaqtida >50% kattalashsa).

▪ UTT da qalqonsimon bez va uni tugunlarini exo-belgilarini baxolash.

▪ Bo'yin limfa tug'unlar monitoringi.

▪ Maxalliy bosim paydo bo'lishi va/yoki ovoz tembrining o'zgarishi mavjud bo'lsa, qayta tekshirish.

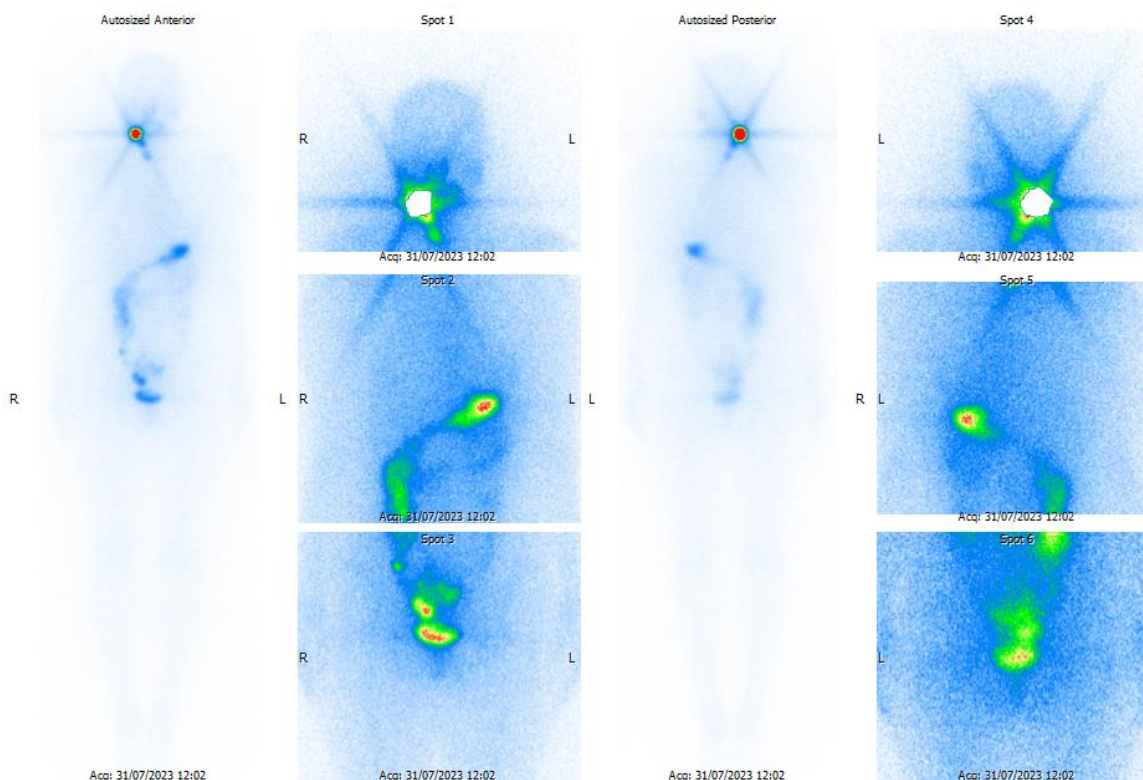**2-rasm:** qalqonsimon bez saratoni OFEKT-KT tekshiruvida.
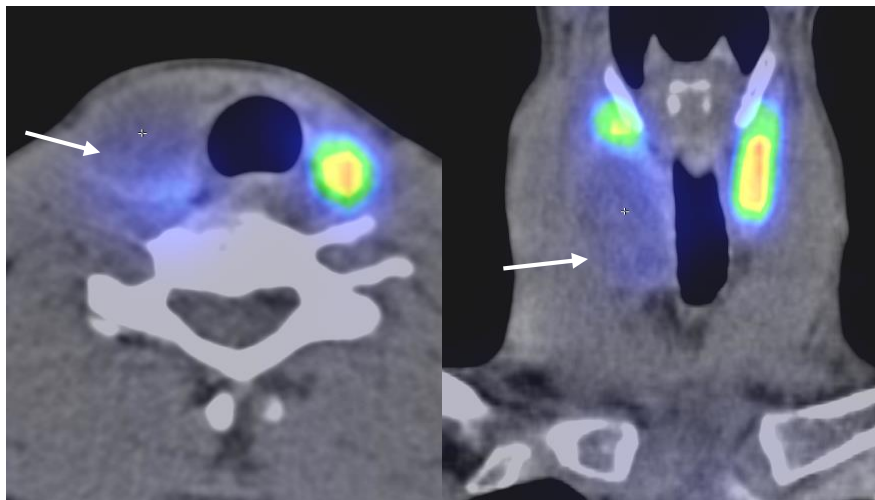
Qalqonsimon bez OFEKT tekshiruvi

Bu tekshiruv 2 qismdan tashkil topgan, birinchisi qalqonsimon bez sintigrafiyasi va ikkinchisi qalqonsimon bez KT tekshiruvi. Bu ikkala tekshiruv bir joyda jamlanib juda katta funksional - anatomik ma'lumotlarni taqdim etadi.

Qalqonsimon bez sintigrafiya tekshiruvi qalqonsimon bez va tugunlarni metabolik faoliyatini baholashga imkon beradi (23,24). Ko'pincha Tc-99m izotopi qo'llaniladi, bu arzon, tez va past radiatsiya yuklanishiga ega bo'ladi. Qalqonsimon bez sintigrafiya tekshiruvi TTG pastki normal chegaralarda bo'lganda foydalanish tavsiya etiladi. So'ngi yillarda, normal TTG bo'lgan insonlarda giperfunksiyaga ega bo'lgan tugunlari ham kuzatish mumkin (42,43). Qalqonsimon bez sintigrafiya tekshiruvini Tc99-MIBI bilan o'tkazishni tavsiya etmaymiz. 18-FDG PET tekshiruvi aniq to'xtamga kelmagan va noaniq taxlillar paytida tavsiya etiladi. KT tekshiruvda – qalqonsimon bezning anatomik xolati, tugunlarning yaxlit kesimda joylashganligi, ekstratireoid tarqalish, atrof to'qimalar – hiqildoq, qizilo'ngach, mushaklar, bo'yin va to'sh orti sohalari tomon o'sishi, limfatik tugunlar xolati haqida ma'lumot olish mumkin.

Qalqonsimon bezni I-131 bilan OFEKT/KT tekshiruvi noaniq yoki shubxali tugunlarni aniqlash uchun xizmat qiladi. Tireosit xujayralarning bazal membranasida yod simporterlari I-131 iztopini qabul qilish uchun xizmat qilib, davolash choralariga yordam beradi. I-131 izotopini tugunlarda ko'p to'planishi – "issiq", aksincha kam to'planishi "sovuq" o'choqlar deb nomlanadi. I-131 OFEKT/KT tekshiruvi jarroxlik jarayonidan keyingi qalqonsimon bez saratoni qo'ldiq to'qimalarini aniqlash, ularni xajmi, kattaligi va anatomik xususiyatlarini baholash, zararlangan ikkilamchi patologik o'choqlar – metastazlarni to'pishga imkon beradi. Bundan tashqari, oldingi I-131 terapiya samarasini baxolashga yordam beradi.

3-rasm: qalqonsimon bez saratoni I-131 terapiyadan keyingi holat (metabolik faol saraton qo'ldiq to'qimasi va zararlangan limfatik tugunlar).

Qalqonsimon bez MRT tekshiruvi

Boshqa usullar bilan taqqoslaganda MRT ikkinchi holatida qo'llaniladi. UTT qalqonsimon bez saratonida dastlabki tashxis qo'yish va keyingi baholash uchun tanlov usuli hisoblanadi. MRT tekshiruvida boshqa instrumental tekshiruvlarga nisbatan bo'yin soxasi yumshoq to'qimalarni baxolash foizi yuqoriroq bo'lib xisoblanadi. Yangi MRT texnologiyasi kontrast yordamida yumshoq to'qimalarining o'simta darajasini va atrofdagi to'qimalarning infiltratsiyasini (tomirlar, nervlar, suyaklar va boshqalar) aniqroq baholaydi.

2-rasm: qalqonsimon bez saratoni MRT tekshiruvida.
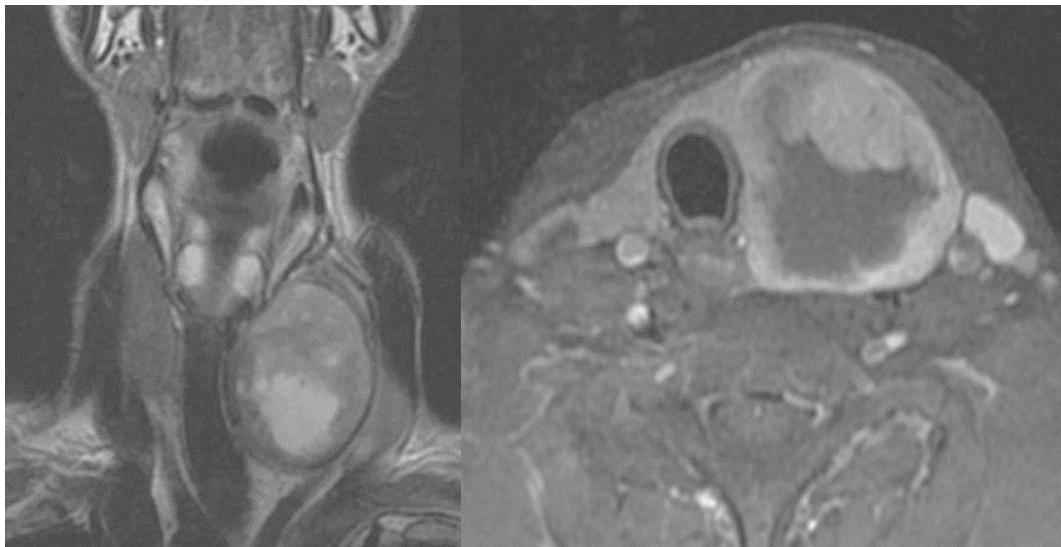
XULOSA

Qalqonsimon bez saratonining tarqalishi oshgani sayin, qalqonsimon bez tugunli kasalliklarini o'z vaqtida aniqlash davolash sifatini yaxshilash uchun zarurdir. Tasviriy tashxis qo'yish usullari qalqonsimon bez saratonini aniqlash va kuzatish uchun ajralmas usullardan bo'lib xisoblanadi, UTT qalqonsimon bez va uning tugunlarini baholashni asosiy tanlov usuli bo'lib xisoblanadi. Ko'rsatmalarga ko'ra, noaniq tugunli xosilalarda OFEKT/KT yoki sitologiya tekshiruvlari o'tkazilishi mumkin. KT tekshiruvi tugunlarni ekstratiroid tarqalishi va metastazlarni aniqlashda yordam beradi. MRT kontrast tekshiruvi qalqonsimon bez saratonini yumshoq to'qimalarga tarqalishini aniqlash uchun xizmat ko'rsatadi, jarroxlik amaliyotidan keyingi xolatni baxolash uchun xizmat qiladi. O'n yil davomida I-131 bilan xam diagnostika xam davolash maqsadida foydalanilgan. FDA (Amerika ozik-ovqatlar sifatni nazorat qilish departamenti) so'ngi yillarda birlamchi o'smalarni davolashda ishlab chiqariladigan va samarasi yuqori bo'lgan yangi izotoplarni ishlab chiqarishi kutilmoqda.

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