**ganviTarebis Tandayolili mankebi**

1. **Tandayolili amputacia** \_ kiduris sruli an misi distaluri nawi-lis ararseboba:
2. amelia \_ Zalian iSviaTad aRiniSneba oTxive kidurebis ararseboba, umetes SemTxvevaSi ar aris mxolod erTi kiduri. klinikuri suraTi Seesa­bameba menj-barZayisa da mxris saxsris egzarti­kulaciis Semdgom suraTs.
3. peromelia **–** aRiniSneba kiduris mxolod nawili, romelic ZiriTa-dad sworad aris ganvi­Tarebuli. klinikuri suraTi Seesabameba kiduris distaluri nawilis amputaciis Semdgom suraTs.

g) fokomelia \_ ganviTarebis am manks uwod­eben agreTve kiduris las-tisebur formas. Mmte­vani an terfi fiqsirebulia uSualod tanTan, kiduris sxva nawilebi ar arsebobs. zeda kiduris narCenebi gamoiyeneba sustad an saerTod ar fun­qcionirebs, xolo deformirebuli qveda kiduri saerTod ar funqcionirebs. menj-barZayis saxsris areSi terfis mdebareoba xels uSlis protezirebas, am SemTxve­vaSi ganixileba sakiTxi misi amputaciis Sesaxeb.

d) eqtromelia – kiduris calkeuli nawili sxivis an idayvis, didi wvivis Zvali an mcire wvivis Zvali ganuviTarebelia an ar arsebobs saer-Tod. ris Sedegadac SeiZleba ganviTardes saxsrebis anomaliebi an mTeli kiduris uxeSi deformaciebi. aseT SemTxvevebSi aucilebelia kiduris operaciuli gasworeba SemdgomSi specialuri orTopediuli saSualebebis gamoyenebiT.

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**2. calkeuli segmentebis an saxsrebis Tandayolili gamrudeba** magaliTad amnionuri Wimi: Tandayolili Zafiseburi CaWeriloba kiduris seg­entis sigrZeze cirkularulad, iSviaTad kidu­ris garSemowerilobis naxevarze, moicavs rbil qsovi­lebs da zewolas axdens maTze Zvlamde. gvxvdeba xSirad. diagnozi - saxezea. **mkurnaloba:** opera­ciuli - iwyeba amnionuri Wimis mocilebiT.

**3. saxsrebis Tandayolili umoZraoba** - fibrozis Sedegad kidurebis saxsrebis nawi­lobrivi an sruli umoZraoba. umetes SemTxvevaSi ziandeba yvela kiduri. **mkurnaloba:** individual­ria, ZiriTadad konservatiuli: keT-deba redresa­ciis mcdelobebi, gamoiyeneba orTopediuli saSualebebi, samkurnalo fizkultura.

**4. Tandayolili cru saxsari** - lulovani Zvlebis defeqti, moZraobis diafizis mTel monak­veTze arsebobiT. diagnozi dgindeba rentgenolo­giuri gamokvlevebisa da paTologiuri moZraobis arsebobis safuZvelze. **mkurnaloba**: operaciuli,kombinirebuli qirurgiuli meTodebi moicavs Zvlo­vani trasplantantebis gamoyenebas kompresi­ul osteosinTezTan erTad ilizarovis, volkov-oganesianis, kalnbrezis da sxva aparat­ebiT. amJa­mad mravali ucxoeli avtori gvirCevs kiduris amputacias cru saxsarTan.

**5. Tandayolili amovardnilobebi** - gansakuT­rebiT xSirad aRiniSneba muxlisa da mxris sax­srebis Tandayolili amovardnilobebi, gvxvdeba agreTve idayvis saxsarSi sxivis Zvlis Tavis amovardniloba. xSirad es defeqtebi kom-binire­bulia kidurebis ganviTarebis sxva anoma-liebTan. yovel konkretul SemTxvevaSi gamoiye-neba amo­vardnilobis Casworebis konservatiuli an opera­ciuli meTodebi. orTopediuli saSua-lebebi ar aris efeqturi.

**6. Femur varum congenitum** - mocemuli paTo­logiis dros barZayis Zvali damoklebulia da xasiaTdeba varusuli deformaciis sxvadasxva xar­isxiT. klinikuri suraTi varirebs kiduris umniS­vnelo damoklebisa da misi 0-seburi mde-bar­eobidan barZayis Zvlis srul ararsebobamde. bav­Svis ganvi­Tarebis raRac drois ganmavlobaSi SeiZleba mox­des mocemuli paTologiis ramde-nadme gamoswo­reba, amitom ar Cqaroben opera-ciul Care­vas. mis nacvlad rekomendirebulia orTopediuli saSua­le­bebis gamoyeneba, romelic xels uwyobs or kidurs Soris sigrZeSi sxvaobis gaTanasworebas.

**7. Coxa vara congenitum** - klinikuri suraTi ze­moT aRwerilis analogiuria. barZayis Zvlis yelis ganviTarebis mankis Sedegad kuTxe massa da dia­fizs Soris Semcirebulia (90º da qveviT). Zu­ZuT kvebis periodSi simptomebi Seesabameba barZa­yis Tan­dayolili amovardnilobisaTvis damaxasiaTe­bel simptomebs. bavSvobis adreul asakSi upirve­les yovlisa naCvene-bia artaSanis gamoyeneba, rome­lic amcirebs datvirTvas, mimRebiT sa-jdomi borcvisaTvis, romelic uzrunvelyofs orTave fexis ga-Tanasworebas sigrZeSi. Zvlis stabiliza­ciis ararsebobis an de-formaciis progresirebis Sem-TxvevaSi aucilebelia makore­girebeli osteo­tomia aRniSnuli kuTxis gazrdis mizniT.

**8. Crus varum con­genitum** - wvivis gamru­deba Sig­niT mxares, xSi­rad aseT deforma­cias Tan axlavs antefleq­sia. mocemuli paTolo­gia warmoadgens wvivis Tandayolili fsevdo­ar­Trozis saxesxv­obas, romelic SeiZleba gan­viTardes deformire­bu­li kiduris gadatvir­Tvis Sedegad (sxeulis masiT), da agreTve Zvlo­vani qsovi­lis Tan­dayolili ara­srulfa­sovnebis Sede­gad. am paTologiis aRmo­f­xvra Zalian rTu­lia. mkur­na­lobis miza­ni - fsevdoar­Trozis war­mo­q­mnis SeCereba upi­r­ve­les yovlisa, roca bav­Svi iwyebs damouki­deb­lad fexze dgomas, is aucilebelia aRv­Wur­voT orTopediuli saSu­a­­le­biT, romelic xsnis deformirebul ki­d­urze datvirTvas, asak­Tan er­Tad matulobs defeqtis operaciuli ko­req­ciis war­matebis Sansic. gan­sa­kuT­rebul mdgrad Sem­­­T­­xvevebSi, roca mkur­na­loba araefeq­turia Sei­Z­leba aucilebeli gax­des kiduris ampu­tacia.

**9. mtevnis an terfis TiTebis calkeuli an Serwymuli hipoplazia an aplazia.** daavadebis stadiis mixedviT mkurnaloba konservatiulidan operaciulamde.

**10. eqtrodaqtilia** (mtevnis naprali) arCeven tipiurs da atipiurs. tipiuri vlindeba mtevnis def­ormaciiT Rrma napralis saxiT, romlis mwver­valmac SeiZleba miaRwios majis Zvlebs. atipiuri: naprali ar aris, magram ar aris III nebis Zvali da mtevnis III an sxva TiTebi. eqtro­daqtiliis dros gamoxatulia moxriTi kontraqtura. mkurnaloba 4-5 wlamde konserva­tiuli, xolo Semdeg operaciuli - aerTeben naprals da keraven lavsanis ZafiT.

**11. sindaqtilia** - ramdenime TiTis sruli an nawilobrivi Sezrda. arCeven kanis, apkovan, Zvl­ovan da daboloebiT formebs. Kkanis sin-daqtilia gvxvdeba xSirad – ori mezobeli TiTi Sexor­ce­bulia mTel sigrZeze, apkovani - TiTebi SeerTe­bulia kanis xidakebis sa-SualebiT, romelic Sedgeba kanis ori furclisagan (romelic sacu-rao apkis msgavsia), Zvlovani - Sezrdilia erTi an ram­denime fa-langi, daboloebiTi – Sezrdi-lia mxo­lod frCxilis falan-gebi. diagnozi ismeba kli­nikuri da rentgenologiuri gamokvlevis safu­Z­­ve­lze. M

**mkurnaloba:** qirurgiuli 5-6 wlidan didos, janeliZis, ternovskis mixedviT.

**12. polidaqtilia** \_ (mravali TiTis arseboba) SeiZleba TiTebis rao-denoba iyos 10-mde. diagnozis dazustebisa da mkurnalobis meTodis arCevis miz­niT tardeba rentgenologiuri gamokvleva.

**mkurnaloba:** qirurgiuli acileben damatebiT TiTebs epifizTan erTad.

**13. Tandayolili xelmrudoba** - Cndeba kunTebis myesebisa da winamxris xelisgul - sxivis mxridan iogebis Tandayolili damoklebis Sedegad da aseve sxivisa da idayvis Zvlis ganuviTareb­lobis gamo. sxivis Zvlis ararsebobis dros ar aris I TiTi da nebis I Zvali. xSirad Tan­dayolili xelmrudoba aris ormxrivi.

**mkurnalo­ba:** opera­ciulia, ilizarovis, RuduSa­uris, kalnb­re­zis aparatebis gamoyenebiT.

**14. winamxris Zvlebis Tandayolili sinostozi** - gvxvdeba iSviaTad, avadmyofs ar SeuZlia wina mxris rotacia.

**mkurnaloba:** operaciuli – Zvlebis sinostozis gakveTa, sxivis Zvlis rezeqcia mTel sigrZeze.

**15. madelungis daavadeba** \_ mtevnis qronikuli qveamovardni-loba, deformacia an madelungis da­avadeba. mtevnis TviTnebiTi Se-cileba wina­mxarTan mimarTebaSi xelisgulis mimarTulebiT erT-drou­lad idayvis an sxivis Zvlis mxares SecilebiT, (xiSti­seburi mtevani) rTuli deformacia, ro-melic moic­avs sxiv-majis saxsris yvela komponents, rasac Tan er-Tvis winamxris deformacia. de-formacia upi­ratesad vlindeba 13-16 wlis asakSi, gogonebSi 4-jer ufro xSirad, vidre biWebSi. daavadeba SeiZl­eba iyos ormxrivi an calmxrivi.

WeSmariti madelungis daavadebis qveS igu­lisxmeba sxivis Zvlis distaluri mzardi firfitis displazia, magram daavadeba SeiZleba ganvi­Tardes SeZenili daavadebis (simsivne, osteomieliti, arareponirebuli epifiziolizi) zegavleniT sxivis distaluri epifizis zrdis Senelebis an SeCerebis SemTxvevaSi. aseT SeZenili xasiaTis gamrudebas upriani iqneboda daerqvas madelungis deformacia.

**klinika:** daTvalierebis dros yuradRebas iqcevs idayvis Zvlis Tavis ukana mxridan mkveTri gamoburculoba, romelic ar ukavSirdeba majis Zvlebs. rentgenogramaze SeiniSneba majis Zvlebis saxsris proqsimaluri xazis rkaliseburi formis Secvla soliseburiT. adgili idayvis Zvlis Tavis SesaxsrebisTvis ar aris. ufro metad deformacias ganicdis sxivis Zvali, romelic mkveTrad gamru­debulia da daxveulia RerZis irgvliv, rac dakav­Sirebulia epifizaruli xrtilis gamrude­bul zrdasTan. sxivis Zvali damok­lebulia, xolo mniSv­nelovani gamrudebis dros Cans kidev ufro mcire zomis normalurad mzardi idayvis Zvalic epifizaluri zrdis zegav­leniT ramdenadme mrud­deba da TandaTan gamodis mtevani Sesaxsrebidan. swored amitom uwodeben daavadebas mtevnis qronikul qveamovardnilobas. xelisgulis zeda­pirisaken gamrudebuli sxivis dis­ta­luri bolo rCeba majis ZvlebTan Sesaxsre­buli, magram amasTan erTad mtevani miiwevs win, rac aZlevs defor­macias xi­Stis saxes: gaswore­buli mtevnis RerZi ar emTxveva winamxris RerZs.

**mkurnaloba** \_ deformaciis gasworeba opera­ciuli gziT ar aris rekomendirebuli 14-15 wlamde SesaZlebeli recidivebis gamo. bolo dros iribi osteotomiis Semdeg iyeneben distraqciul aparatebs.

**16. arTrogripozi** \_ aris kidurTa saxsrebis Tandayolili mravlobiTi kontraqturebi. termini arTrogripozi SemoTavazebulia 1923 w. W.Stern-is mier arthron - saxsari da grypos - aqvs ori mniSv­neloba:

1. rogorc - moRunuli

2. rogorc - grifi - miTiuri, oTxfexa mtace­be­li frinveli

W.Stern-is mixedviT arTrogripozi aris kidurebis Tandayolili mravlobiTi kontraq­turebi xSirad kombinaciaSia amovardnilobebTan, anki-lozebTan da ConCxis sxva anomaliebTan.

arTrogripozis warmoSobas ukavSireben ku­nTebis displazias, romelic viTardeba pirveladi darRvevis niadagze an meqanikuri mizezebis gamo nayofis araswori ganviTarebiT. dazianebul kun­TebSi naxuli aris Rrma distrofiuli cvli­lebebi - atrofia da kunTis boWkoebis degeneracia da maTi Canacvleba cximovani qsoviliT.

**klinika:** kontraqturebi arTrogripozis dros gamoirCeva mravalfe-rovani deformaciebiT da xSirad Tan axlavs amovardnilobebi, qveamovar­dnilobebi, ankilozebi. misTvis damaxasiaTebelia saxsrebis konturebisa da kunTebis reliefis gadasworeba. aqtiuri moZraobebi mkveTrad SezRu­du­lia an saerTod ar aris. pasiuri moZra­obebi SesaZlebelia, Tumca umniSvneloa moculobaSi da iwvevs mkveTr winaaRmdegobas. mtevani da TiTebi moxrilia da mozidulia, idayvebi gaxsnili. mxrebi mikruli sxeulze. menj-barZayis saxsrebSi xSirad gamzidav-moxriTi kontraqturebi, muxlebSi gaSlili, terfebi Sinagani an garegani terfmrudobis mdgo­mareobaSi. saxis da tor-sis kunTebi arTrog­ripo­zis dros arasdros ar ziandeba.

**mkurnaloba \_** ZiriTadad konservatiuli. is unda iyos dawyebuli rac SeiZleba adre da mimarTuli deformaciebis gasworebasa da funq­ciis aR-dgenaze. terfis deformaciebi eqvemdeba­reba aRdgenas etapobrivi makore-girebeli nax­vevebiT. barZayis amovardnilobis Casworeba xdeba im SemTxve-vaSi, Tu Camoyalibebulia tabuxis foso. operatiuli mkurnaloba rbil qsovilebze da Zvle­bze poulobs gamoyenebas Serwymuli konser­vatiul meTodebTan - makoregirebeli naxvevebi da daWimvebi. Zalian didi mniS-vneloba aqvs fizi­oTerapias kunTebis funqciis aRdgenisaTvis.

**malebis ganviTarebis anomaliebi**

malTa sxeulebis de­f­or­macia viTardeba oste­ogenezis lokaluri dar­Rve­vis Sedegad.

malis sxeuli SeiZ­le­ba iyos brtyeli (pla­ti­spo­ndilia), damokle­bu­li (braqispondilia) da brtye­­li da damoklebuli (platibraqispondilia), Se­mci-rebuli yvela zomaSi (mikrospondilia). yvela­ze xSirad viTar­­deba gulmke­r­dis nawilis anomalia.

paTologiuri motexi­lo­­b­ebisagan gan­sxvav­de­bi­an ma­l­Ta sxeulebis mka­fio konturebiT da Cveu­leb­­rivi Zvlovani struq­tu­ris SenarCu­nebiT. sol­i­­se­bu­ri da bafTiseburi (p­e­pe­­lasmagvari) malebi ufro xSirad lokalize­bulia kisris qvemo da gulmkerdis zemo nawi­lebSi. ukana soliseburi malebi iwveven kofozs, gverdiTi \_ sqoliozs, bafTiseburebi gamrudebas ar iwveven.

**malebis Serwyma**

**(sinostizi, konkresencia)**

xdeba malTaSua dis­kebis aplaziis an hipo­plaziis gamo, erTmaneTs SeiZleba Seerwyas malTa sxeulebi an morCebi, an mxolod sxeulebi, sru­lad an nawilobriv. gvxvdeba kisris, iSvia­Tad gul­mkerdis nawi­lebSi. aRi-niS­neba malTa­Sua dis­kis ar­ar­seboba an mkveTri dadab­leba Cveu­lebrivi formis, zomebis, Serwymuli malebis kon­tu­rebis SenarCunebiT.

zogjer aris ganu­viTarebeli malTa blo­kebi, xSirad soliseburi for-mis. kisrisa da gul­m­kerdis nawilSi ramdenime malis erTian blokad Ser-wymas uwodeben klipel-feilis daavadebas. da­ma­xasiaTebelia mokle kiseri, Tmebis xazis daba­li sazRvari, kisris nawilSi moZraobis SezRudva. rent-genogramaze isazRvreba 4-5 Serwymuli malisa­gan Semdgari uxeSi Zvlovani masivi diskis sruli ararsebobis dros.

**malTa rkalis defeqtebi**

ganpirobebulia osteogenezis lokaluri dar­Rvevis Sedegad rkalTa ukana an gverdiTi nawi­lebis arasruli ganviTarebiT. Si Lv an iSviaTad sxva malebis rkal-Ta ukana nawilebis faruli Seu-xorcebloba ararsebul an ganuvi-Tarebeli wvetiani morCebis dros gvxvdeba janmrTeli ada­mianebis 10% Si da warmoadgens normis erT-erT formas. rkalis Ria Seuxorce-bloba, Serwymuli malis sxeulis defeqtTan (raqiSizi) viTardeba upiratesad welis an kisris nawil-Si da SeiZleba iyos zurgis tvinis Tiaqris mizezi. ganviTarebis aseTi manki vlindeba Zvlovani defeqtis doneze simsivniseburi gamoburcu-lobiT da hipertriqoziT.

**raqiSizi**

vlindeba tipiur rbilqsovilovani warmonaq­mnis saxiT gava-welis nawilSi lokaluri hiper­triqozis ganviTarebiT. Tiaqari SeiZleba Sedge­bodes mxolod garsebisagan, garsebisa da qer­qisagan, da SeiZleba Seicav-des zurgis tvinis ele­mentebs. is ar aris dafaruli rkalebis Zvlovani da xrtilovani elementebiT.

rentgenogramaze pirdapir proeqciaSi aRiniS­neba malebis rkalebis gavrcobili ukana defeqti.

**barZayis Tandayolili**

**amovardniloba**

roca saubroben barZayis Tandayolili amo­vardnilobis sixSireze, mxedvelobaSi aqvT ara marto barZayis Zvlis Camoyalibebuli amovardni­loba, romelic iSviaTad aRiniSneba sicocxlis pirvel dReebSi, aramed egreT wodebuli menj­barZayis saxsris displazia, ris fonzec bavSvis ganviTarebasTan erTad yalibdeba amovardniloba.

adamianis ConCxma filogenezisa da anTro­pogenezis procesSi, miiRo iseTi orTograduli mdgomareoba roca eyrdnoba mxolod or ukana kidurs. Semdeg moxda sxeulis kinematikis didi cvlilebebi, ris gamoc saWiro gaxda mTeli ConCxis mniSvnelovani anatomiuri gardaqmna, masTan erTad menjis sartylis menj-barZayis saxsrebTan erTad. menji daxrilia, rac qmnis kuTxes horizontalur sibrtyesTan. mniSvnelovnad gafarTovda TeZos Zvlebi, romelic iWers Sinagan organoebs vertikalur mdgomareobaSi. ukana kidurebi gaxda qveda da miiRo Tavis Tavze sxeulis mTeli simZime. barZayis Zvlebi gaxda ufro masiuri, Sebrunda win ise, rom muxlis saxsari gamarTulia win. barZayis Zvlis pro­qsimalur nawilSi ganviTarda yel-diafi­zaruli kuTxe, romelic damaxasiaTebelia mxolod ada-mianisTvis. ramdenadme dagrZelda da Sebrunda barZayis Zvlis yeli. menj-barZayis saxsars ada­mianis sxeulis orTogradul mdgomareobaSi daa­wva didi statistikuri da funqcionaluri datvi­rTva. dgomis dros mTeli sxeulis simZime Tanab­rad nawildeba orTave saxsarze, siarulis dros ki mona-cvleobiT gadadis mTlianad erTi saxsr­i­dan meoreze.

ramdenadac vertikalur mdgomareobaSi sxeulis simZimis centri gada-adgilda menj-barZayis saxsris RerZidan ukan, gadaadgilda io­go­vani da kunTovani aparatic. mniSvnelovnad gaZlierda gamSleli kunTebi, vidre momxreli kunTebi. masiuri gaxda yvela wina iogi. menj-barZayis saxsari \_ erTaderTi saxsaria, sadac sasaxsre foso warmodgenilia ara erTi ZvliT, aramed yalibdeba, rogorc erTi mTliani sami Zvlisagan, romlebic Seer-Tebulia Y-eburi xrtiliT. TeZos Zvali qmnis fosos yvelaze did zeda segments - e.w. saxuravs, romelzec modis ZiriTadi kinetikuri datvirTva, rogorc statikuri, aseve funqcionaluri. sajdomi Zvali qmnis ukanaQqveda, xolo boqvenis Zvali wina patara segments. menj-barZayis saxsari ara kongruentulia. Tavisi anatomiuri zomebiT tabuxis foso ufro mcirea, vidre masSi myofi barZayis Zvlis Tavi. es sxvaoba nawilobriv ivseba 6 mm simaRlis boWkovani xrtilis mkvrivi WimiT (tabuxis bage), romelic saxsris SigniT emagreba fosos mTeli Zvlovani kidis gaswvriv, ris gamoc is izrdeba siRrmeSi.

TviT saxsris zedapiri, romelic dafarulia hialinuri sasaxsre xrti-liT, ikavebs ara mTlian fosos, aramed lagdeba mis periferiulad qvemo-dan Ria naxevarrgolis (naxevarmTvariseburi zedapiri) saxiT, romelsac gaaCnia ufro grZeli ukana monakveTi fosos Sua nawili, fuZe da amonaW-devi, romelic midis mis qveda kidemde aris saxsarSida mrgvali iogis mimagrebis adgili. amis gamo mcirdeba saxsris zedapiri da aqedan gamom-dinare saxsris fosos zedapiris, da Tavis sinovialuri CaWidebis Zala. barZayis Zvalze sasaxsre CanTa emagreba win tabuxis Sua xazze, xolo ukan - yelis Sua xazze ise rom TiTqmis mTeli yeli, romelic aris diafizis na­wili, Tavsdeba TavTan erTad saxsarSi.

dabadebis momentisaTvis saxsris yvela ele­menti Sedgeba xrtilisagan, gaZvalebuli aris mxolod barZayis Zvlis diafizi da menjis sami Zvlis sxeulis centraluri nawili. axalSo­bilebis tabuxis foso aris brtyeli, TeZos Zvlis zeda ukana xrtilovani kide ar aris ganviTa­rebuli. safari ar aris Camoyalibebuli da ar uqmnis sakmao sayrdens Tavs. tabuxis fosos xrtilovani TaRi sworxazovania an odnav gamozne­qili. rentgenogramaze is aris qveviT daqanebuli, radgan suraTze gamosaxulia TeZos Zvlis gaZ-valebuli nawilis sazRvari, romlis gaZvale­bac mimdinareobs ufro aqtiu-rad misi sxeulis Sida nawilSi. tabuxis fosos fuZis gadideba xdeba menjis Zvlis xrtilovani masis zrdis xarjze maTi TandaTanobiTi gaZva-lebiT, maSin ro­ca fosos sasaxsre zedapiri da kideebi yalibdeba gaZvale-bis mravlobiTi damatebiTi centrebis xarjze, romlebic Cndeba mniSvne-lovnad gvian - 6-8 wlisaTvis. gaZvalebis aseTi centrebi Cndeba Y-sebur xrtiliSi, romelic aerTianebs menjis sam Zvals da xels uwyobs maT sino­stozirebas, roca bavSvi iwyebs siaruls, TaRi xdeba Sezneqili da wlisaTvis rentgenogramaze mkafiod vlindeba misi araTanabari konturebi, romelic ganpirobebulia TeZos Zvlis ZiriTadi xrtilovani Sris aqtiurad mimdinare gaZvalebis procesiT. am dros Cndeba didi borcvis gaZvalebis centri, xolo 10 wlisaTvis - mcire. 10-12 wlisa­Tvis fosos zeda ga­re kidesTan Cndeba gaZvalebis yvelaze didi damatebiTi centri, ramdenadac is monawileobas Rebulobs fosos sasaxsre zedapiris Camoyalibe­baSi, zogi-erTi avtori ganixilavs mas rogorc epifizs, menj-barZayis saxsris Camoya­libeba mTavardeba 16-18 wlisaTvis.

menj-barZayis saxsris aseTi rTuli aRnagoba da osteogenezis Tavise-bureba ganapirobebs masSi displastiuri procesisa da barZayis Tandayo­lili amovardnilobis xSir ganviTarebas.

barZayis Tandayolili amovardnilobisa da menj-barZayis saxsaris displaziis ufro xSiri siptomebia:

1. menj-barZayis saxsarSi ganzidvis SezRudva. (barZayis gveriT ganzid-vis SezRudva aRiniSneba sxva daavadebebis drosac: Tandayolili coxa vara, spastiuri dambla da a.S.);
2. dacurebis an tkacunis simptomi (marqs-ortalanis simptomi) – bar-Zayis maqsimaluri ga­nzidvis dros erTdroulad misi SigniT rotaciiT Tavi damaxasiaTebeli xmiT Tavsdeba fosoSi; Tumca es simptomi xSirad aRiniSneba axalSobil­ebSi normaSi da qreba sicocxlis me-7-10 dRisaT­vis. Tu simptomi narCundeba 1-2 Tvis ganmavlobaSi, es mowmobs paToliogiuri cvlile­bebis ganviTar­ebaze;
3. barZayisa da dunduloebis naoWebis asi­met­ria - amovardnilobis an displaziis ukana mxares naoWebi ufro Rrma aris da ganlagebulia ufro proqsimalurad vidre janmrTel mxares;
4. qveda kiduris TvaliT SesamCnevi damokleba - axalSobilebisa da mcire asakovani jgufis bavSvebSi gvxvdeba iSviaTad da Cveulebriv barZa­yis maRali amovardnilobebis dros.
5. qveda kiduris garegani rotacia - ufro mkafiod es simptomi vlin-deba bavSvis Zilis dros. Tumca es SeiZleba aRiniSnos normaluri menj-bar­Zayis saxsris drosac, ris gamoc aucilebelia sxva klinikuri simpto-mebis gamovlenac.

Tandayolili amovardnilobis ZiriTad diag­no­s­tikur meTods warmoa-dgens rentgenolo­giuri gamokvleva.

barZayis Tandayolili amovardnilobis adreu­li rentgenologiuri simptomebi pirvelad gansa­zRvra orTopedma putti-m 1927 wels, man Semog-vTava­za klasikuri “triada”;

1. tabuxis fosos safaris momatebuli daqa­neba;

2. barZayis proqsimaluri daboloebis Secil­eba tabuxis fosos gareT da zemoT;

3. gaZvalebis birTvebis gviani aRmoceneba da hipoplazia.

amovardnilobis ganviTarebis procesSi menj-barZayis saxsris yvela elementi ganicdis cvli­lebebs: tabuxis foso ivseba cximovani da Se­maer­Tebeli qsoviliT; li­mbusi da fosos irgvliv mde­bare xrtilovani bage Cveulebriv brundeba saxsris RruSi sasaxsre CanTis nawilTan erTad, ris Sedegadac am adgi­lze viTardeba damaxasiaTe­beli Seviwroeba “maryuJi” SemdgomSi Cabrunebuli limbi SeiZleba Seezardos tabuxis fosos fuZes.

xdeba sinovialuri garsis atrofia, gansakuT­rebiT mis qveda nawilSi. barZayis Zvlis Tavis saxsarSi Sida iogi iWimeba, xdeba boWkovani, viTar-deba misi SemaerTebel qsovilovani struq­turebis mniSvne­lo­vani distro-fiuli cvlilebebi.

zemoT bar­Zayis Secilebis mudmivi winaaR­mdegobis Sedegad xdeba saxsris kafsulis gamkv­riveba zogjer xrtilis konsistenciamde. amovard­nilobis ganvi­Tarebis procesSi CarTulia ara marto iogovani, aramed menj-barZayis saxsris mTeli Zvlovani aparati. barZayis Zvlis Tavi rogorc wesi Sem­ci­rebulia da deformirebulia. nawilobriv aRini­Sneba antetorsiis mdgomareoba - barZayis proqsi­maluri daboloebis winisaken mobruneba. aRiniS­neba tabuxis fosos daqaneba misi garegani Zlovani gamoburculobis ganuviTa­rebloba, aseve mTeli menjis sartylis im mxares, sadac ganviTarda amo­vardniloba. saxsarze ara­sakmarisi funqcionaluri dat-virTva iwvevs amo­vardnilobis gan-viTarebas. uf­rosi asakovani jgu­fis bavSvebSi amovardnilo­basTan erTad Zlier­deba welis lordozi.

pirveli 6 Tvis asakSi bavSvebSi mizan­Se­wonilia rentgenogramis SefasebisaTvis hilge­nraineris sqemis gamoyeneba.

ufro didi asakobrivi jgufis bavSvebSi gamoiyeneba. reinbergisa da ombredanis sqema.

rentgenogramaze atareben ramdenime xazs.

1. keleris xazi, gadis orTave fosos centr­ebze (Y-seburi xrtili);
2. perpendikulari diafizis umaRlesi werti­lidan keleris xazamde, normaSi is Seadgens araumetes 1 sm;

g) ombredanis xazi, vertikaluri xazi, rome­lic eSveba sasaxsre fosos safaris zeda gare ki­didan. normaSi barZayis Zvlis Tavi ganlagebulia am xazze an mis SigniT;

d) acetabuluri kuTxe: kuTxe, romelic mdebareobs keleris xazsa da fosos safaris kide­ze gamaval xazs Soris normaSi is ar aRemateba 300 (axalSobilebSi);

e) Sentonis xazi: xazi romelic gadis tabuxis fosos zeda kidesa da barZayis yelis qveda kideze, normaSi es aris swori formis rkali;

v) kalves xazi: gadis TeZos Zvlis gare kidesa da barZayis yelis zeda kideze, normaSi es aris swori formis rkali.

bavSvebSi erTi wlis Semdeg erT-erTi pirveli simptomi aris siarulis gviani dawyeba (simptomi ar aris absoluturi, gvxvdeba ormxrivi amovar­dnilobis dros), pirvel nabijebs dgamen 14-15 Tvis asakSi, aRiniSneba gardamavali koWloba an Taviseburi meryeoba, ixvis siarulis msgavsi, ormxrivi amovardnilobis dros.

amovardnilobis mxares barZayis ganzidva SezRudulia, magram rotaciuli moZraobebi menj-barZayis saxsarSi SesaZlebelia ufro didi moculobiTi vidre normaSi (Sasiniakis simptomi).

Camoyalibebuli amovardnilobis klasikuri niSani aris trende­lenburgis dadebiTi simptomi (Tumca trendelen­burgis simptomi - aris ara mxolod barZayis Tandayolili amovardnilobis mizezi aramed dgomis mxa-res dundula kunTebis tonusis modu­nebiT gamowveuli nebismieri paTo-logia).

bavSvis zurgze wolis dros advilad isaz­Rvreba diupuitrenis simp-tomi - quslis midamoSi zewolis dros isazRvreba RerZis irgvliv fexis moZraobis da misi zeviT gadaadgilebis unari.

calmxrivi amovardnilobis dros barZayis no­r­maluri Tavi imyofeba ra fosoSi, isinjeba bar­Zayis arteriis pulsirebis doneze, xolo mtkivneul mxares Tavi ar isinjeba.

bavSvebSi ren­tgenologiurad arCeven amovardnilobis 4 xarisxs.

**I xarisxi** \_ Tavi mdebareobs lateralurad, magram ara fosos doneze (am mdgomareobas ewo­deba qveamovardniloba). qveamovardnilobis dros tabuxis fosos ganuviTarebloba minimaluria da Tavi rCeba mis RruSi. Tavis ganviTareba SeiZleba ar dairRves an xdeba misi Sida yvelaze Rrmad mdebare nawilis deformacia. calmxrivi qveamo­vardnilobis dros aRiniSneba barZayis Zvlis ye­lis medialuri naxevarcilindris qerqovani Sris mniS-vnelovani kompensatoruli gasqeleba.

**II xarisxi** \_ Tavi mdebareobs iribad ganlagebuli fosos zemo nawil-Tan Y-seburi xrtil­is horizontaluri xazis zeviT. barZayis Zvlis Tavi gamodis fosodan, magram Cerdeba mis gare kedelTan. Aam adgilze yalib-deba axali saxsari, romlis fosoc nawilobriv lagdeba TeZos Zvlis sxe-ulis wina gare zedapirze. mas erwymis Tavis Sida seqtori, xolo gare, romelic aRar fu­nqcionirebs, ganicdis mniSvnelovan atrofias. tabuxis fosos ganTavisuflebuli nawili rCeba carieli.

**III xarisi** \_ mTeli Tavi mdebareobs tabuxis fosos zeviT, SeiZleba fsevdofosos ganviTareba. barZayis Zvlis Tavi gadainacvlebs kide ufro gareT da zeviT, klinikuri suraTi am dros ufro gamoxatulia. menjis daxriT win Zlierdeba welis lordozi. Aamovardnilobas xSirad erTvis Tavis aseptiuri nekrozi.

**IV xarisxi** \_ Tavi maqsimalurad maRla gan­lagdeba TeZos Zvlis frTis zeda nawilTan. menji ixreba win, misi lateraluri konturi kargavs gamo-burculobas da xdeba TiTqmis sworxazovani. menjis ganivi zoma mcirdeba. Tavis menjTan Sexe­bis adgilze yalibdeba brtyeli midamo. swordeba mas-Tan SexebaSi myofi Tavis nawilic. yalibdeba neoarTrozi. mkveTrad ir-Rveva barZayis Zvlis proq­simaluri nawilis Camoya­libeba, imdenad ramde­na-dac amovardnilia Tavisa da didi cibru­tis funqcia. yeli brundeba Tavis RerZis irgvliv, is damoklebuli da atrofi­rebulia. Tavi defor­mirebulia da Semcirebulia zomebSi. dacarie­lebuli foso swordeba da ivseba cximo-vani da SemaerTebeli qsoviliT.

**diferencialuri diagnostika:** meZuZur bav­SvebSi barZayis Tandayolili amovardniloba displaziis an amovardnilobis arsebobis dros unda ganvasxvavoT barZayis Tandayolili damok­lebisagan, aseve fiziologiuri an spastiuri kunTovani hipertoniisagan. 1 wels zemoT bavSvebSi barZayis Tandayolili amovardniloba unda gan­vasxvavoT Semdegi daavadebebisagan:

1. daavadeba, romelic gvaZlevs amovardni­lobis sindroms (barZayis paTologiuri amova­rdniloba, romelic viTardeba damblis, osteomielitisa da travmis Sedegad);

2. barZayis yelis varusuli deformaciiT mimdinare daavadeba (raqiti, qondrodistrofia, pertesis daavadebis Semdgomi deformacia, barZayis yelis osteomieliti da simsivne, barZayis Zvlis sxvadasxva eTiologiis qondrodisplazebi da epifiziolizebi).

**mkurnaloba:** Tandayolili amovardnilobis mkurnaloba SeiZleba dai-yos ramdenime etapad.

1. axalSobilebisa da pirveli kvireebis bavSvebis konservatiuli mkur-naloba;
2. 3 Tvidan 1 wlamde bavSvebis konservatiul mkurnaloba;
3. 1-dan 3 wlamde bavSvebis konservatiul mku­r­na­loba;
4. 3 wlidan bavSvebis operaciuli mkur­naloba;
5. mozardebis operaciuli mkurnaloba;

axalSobilebisa da I kvireebis bavSvebis kon­ser­vatiuli mkurnaloba: farTo Sexveva \_ 20 sm siganis safeni bavSvis fexebs Soris, romelic mo-xrilia muxlisa da menj-barZayis saxsrebSi kiduris 60-800–iT gaSlil mdgomareobaSi, samkurnalo fizkultura, moxrili fexebis ganzidva 6-7 jer 15-20 varjiSi 4 Tvis asakamde.

orTopediaSi miRebulia Semdegi mdgomareobebis gansazRvra: menj-bar-Zayisa da muxlis saxsrebSi swori kuTxiT fexebis moxra da barZayis sru-li ganzidva sawolis sibrtyemde, rogorc lorenc I-is mdgomareoba. fexe-bis ramdenadme gasworebul mdgomareobas gluv kuTxemde zemoT aRniSnul saxsrebSi. ewodeba lorenc II-s mdgomareoba, srulad gasworebul mxolod ramdenamde ganziduls \_ lorenc III-s mdgomareoba.

lorenc III-is mdgomareobaSi displaziis mkurnalobisaTvis iyeneben specialur ganmzidvel vilenskis artaSanebs, amovardnilobebis an gamo­xa-tuli displaziebis dros gamoiyeneba sxvadasxva saxis artaSani lorenc I-is mdgomareobaSi. 3 Tvemde asakis bavSvebSi SeiZleba visargebloT sxva-dasxva rbili mowyobi­lobebiT, romlebic qmnian avadmyofisaTvis auci­lebel swor mdgomareobas: baieris azRudi, pavlikis Tasma, freikis bali-Si, ЦИТО-s artaSani, farTo Sexveva.

6 Tves zemoT bavSvebis mkurnalobisaTvis artaSani ar gamoiyeneba, gamoiyeneba naxevrad mdgari artaSani (volkovis artaSani, polonskis sawo-li).

unas pasta \_ 1 naw. cinkis zeJangi, 2 naw. Jelatini, 3 naw. distilire-buli wyali, 4 naw. gli­cerini an kleoli (kleoli iwvevs gaRizianebas an damwvrobas).

1 wels zeviT asakis bavSvebSi Tandayolili amovardnilobis mkurna-lobis klasikuri meTodi aris paCi-lorencis meTodi - is mdgomareobs narkozis qveS ZaldatanebiT CasworebaSi barZayis daqaCvisa da ganzidvis gziT. ormxrivi amovardni­lobis dros Casworeba orive mxares xdeba erTmomentad (xSiria garTulebebi).

amovardnil­obis unarkozod Casworeba etapuri TabaSiris naxveviT an webovani daWimvis gziT: webovani daWimvis, an TabaSiris naxvevis da­debis gziT: sruldeba RerZze tvirTiani Wimis dadeba da fexebis TandaTanobiTi ganzidva. fexebi daki­duli aris vertikalur mdgomareobaSi Sades meT­odiT. daWimva grZeldeba erTi Tves, Semdeg Wims xsnian, modunebuli kunTebi narkozis gareSe iZleva saSualebas Caswo­rdes fososTan midebuli barZayis Zvlis Tavi, romelic rentgenologiuri kontrolis Semdeg fiqsirdeba TabaSiris naxveviT “kavaleristis mdgomareobaSi” - ganziduli qveda kidurebis gaSlil da SigniT rotirebul mdgomareobaSi. 3-4 Tvis ganmavlobaSi fiqsacia uzrunvelyofs fosoSi Tavis myar dgo­mas.

Tandayolili amovardnilobis operaciuli mkurnaloba naCvenebia 3 wlis zemoT asakis bavSve­bSi. 2-3 wlis asakSi Causwo­rebeli amovardnilobe-bis. gviani reluq­saciebis da sxva garTulebebis Semdeg. romlebic viTar-deba amovardnilobebis konservatiuli meTo­debiT Casworebis Semdeg.

operaciebi barZayis Tandayolili amovardni­lobebis dros SeiZleba daiyos ramdenime jgufad.

1. amovardnilobis Ria Casworeba tardeba kargad ganviTarebuli fo-sosa da sworad ganvi­Tarebululi Tavis dros, roca operaciuli gziT xdeba mxolod xelisSemSleli momentis CanTis zeyelis an fosos Cab-runebuli xrtilovani qedis mocileba.
2. Ria Casworebisa da rekonstruqciuli opera­ciebis Serwyma.
3. rekonstruqciuli operaciebi TeZos Zvlis fuZesa da barZayis Zvlis zeda boloze.
4. paliatiuri operaciebi.

farTo gamoyeneba hpoves operaciuli mkurna­lobis Semdegma meTodebma: varizaciuli osteo­tomia, menjis osteotomia xiaris mixedviT, menjis os-teotomia solteris mixedviT, barZayis Zvlis Tavis Ria Casworeba kolonis mixedviT, amnioplas­tika volkovis mixedviT, homoplastika fiSkinis mixe-dviT da sxva.

tabuxis fosos zeda kidis rekonstruqcia sax­sris gakveTis gareSe (ke-nigis mixedviT). operaciis amocana aris BbarZayis Tavs misces saimedo sayr-deni da moaxdinos menj-barZayis saxsaris qveamovardnilobis ganviTarebis profilaqtika.

menjis sruli osteotomia xiaris mixedviT keTdeba qveamovardnilobis dros, tabuxis fosos kargad gamoxatuli safarisa da menj-barZayis saxsris displaziis dros koqsitur naxvevs gamweviT adeben 2 Tvemde vadiT.

menjis osteotomia solteris mixedviT rekomendirebulia tabuxis fo-sos daqanebuli safaris dros, imitom rom Carevis Semdeg TeZos Zvlis distaluri fragmenti Rebulobs ufro daxril mdgomareobas da barZayis Zvlis Tavi ifareba TeZos ZvliT.

acetabulis zemoT arsebuli Tandayolili amovardnilobis dros tar-deba operacia vo-lamis mixedviT.

dReisaTvis mizanSewolilad iTvleba ymawvi­lo­bis asakSi menj-barZayis saxsris totaluri endoprotezireba

**Tandayolili kunTovani kisermrudoba**

kisris deformacias, romelic saxiaTdeba Ta­vis araswori dgomiT, Tavis daxriTa da misi mob­runebiT mopirdapire mxares ewodeba kiser­mru­doba. Tavis aseTi mdgomareoba damokidebulia cvlile­bebze rbil qsovilebSi, ZvlebSi, sisxlZar­Rvebsa da nervebSi. yvelaze xSirad kisermrudoba viTar­deba mkerd-laviw-dvrilisebri kunTis paTo­lo­giuri cvlilebebis dros, iSviaTad xerxemlis kisris nawilis ganviTarebis anomaliis Sedegad.

arsebobs kisermrudobis mravali sxvadasxva formebi, magram radganac ar aris cnobili bevri maTganis eTiologia da paTogenezi klasifikaciis dros xelmZRvaneloben deformaciis ganviTarebis droiT. klinikuri suraTi isazRvreba imis mixed­viT Tu romeli qsovili (Zvlovani, kunTovani da a.S.) aris dazianebuli.

kisris deformaciebi, romelsac Tan erTvis ki­se­rmrudoba SeiZleba iyos Tandayolili da SeZenili.

ufro xSirad gvxvdeba Tandayolili kunTo­vani kisermrudoba, romelic ganpirobebulia mkerd-laviw-dvriliseburi kunTidan erT-erTis sigrZis (Zalian iSviaTad oris) da xerxemlis kisris nawilis SeusabamobiT. mkerd-laviw-dvrili­seburi kunTis arasakmarisi sigrZe ganpiro­bebulia misi Tandayolili ganuviTareblobiTa da cvli­lebebiT, romelic xdeba mSobiaro-bis aqtis dros da Semdeg gare faqtorebis zemoqmedebiT. es iwvevs Tavis daxras dazianebuli kunTis mxares da sawinaaRmdego mxares mobrunebas, rasac Tan er­Tvis cvlilebebi xerxemalSi, laviwsa, Tavis qalaSi.

Tandayolili kunTovani kisermrudoba sa­yrden-mamoZravebeli sistemis sxva Tandayolil deformaciebTan mimarTebaSi Seadgens 3-dan 13%-mde.

**eTiologia:** Tandayolili kunTovani kisermru­dobis Sesaxeb erTiani Camoyalibebu­li azri ar arsebobs. daavadebas ganapirobebs Se­mdgomi Zi­riTadi faqtorebi: mSobiarobis dros mkerd-laviw-dvriliseburi kunTis boWkoebis gaxeva myesSi gadasvlis adgilze; saSvilosnos RruSi nayofis Tavis daxrili mdgomareoba xangrZlivi drois ganmavlobaSi, ris Sede-gadac kunTi mokldeba; qronikuli intersticialuri mioziti SemdgomSi kisermrudobiT; kunTSi distrofiuli cvlilebebi, romelic ganpirobebulia mSobiarobis dros arte­riuli iSemiiT an venuri staziT, magaliTad nayo­fis yelze Semoxveul Wiplaris zewolis Sedegad; mkerd-laviw-dvrilise-buri ku­nTis ganviTarebis manki.

mkerd-laviw-dvriliseburi kunTi filogeneti­kurad viTardeba farTo trapeciuli kunTis wina kididan kunTis ZiriTadi masisagan gamoyofis gziT. mkerd-laviw-dvriliseburi kun­Tisa da tra­peciuli kunTis filogenetikuri warmoSobis sir­Tu­liT aixsneba maTi aRnagobis didi varia­beloba. mkerd-laviw-dvriliseburi kunTs SeiZleba hqondes 2-dan 4 fexamde da damatebiTi kunTovani wnulebi. Tandayolili kunTovani kisermrudobis dros SeiZleba adgili hqondes am kunTebis ganuviTareb­lobas da maT adgilze boWkovani SemaerTebeli qsovilis ganviTarebas, romelic aRnagobiT hgavs myess. es gvaZlevs uflebas CavTvaloT mkerd-laviw-dvriliseburi da trapeci­uli kunTebis boWkoebis raodenobis cvlileba normisagan gada­xrad, rac ganapirobebs Tandayoli­li kunTovani kisermrudobis ganviTarebas.

Aam Teoriis Tanaxmad, is bavSvebi, romlebsac aqvT ganuviTarebeli kunTovani boWkoebis mniSvne­lovani raodenoba an kunTis nawili romelic warmodge­nilia SemaerTebeli boWkovani qsoviliT ibadebian klinikurad gamoxatuli kisermrudobiT. mkerd-laviw-dvriliseburi kunTis umniSvnelo ganuviTa­reb­lobis SemTxvevaSi bavSvis dabadebis dros deformacia gamo-xatulia, magram umetes SemTxve­vaSi bavSvis zrdasTan erTad kompensirdeba da deformacia ar viTardeba.

sxva SemTxvevebSi mSobiarobis dros da dabadebis pirvel dReebSi ganuviTarebeli kunTi mniSvnelovnad iWimeba, irRveva misi kveba, ris Sedegadac viTardeba masSi nawiburovani procesi, romelic zrdis mis Tandayolil arasrulfa­sovnebas. amgvarad Tandayolili deformacia ya­lib­deba endogenuri faqtorebis da Zlierdeba egzogenuri faqtorebis zemoqmedebiT.

В.М. Афанасьев-is monacemebis Tanaxmad, bav­SvebSi Tandayolili kunTovani kisermrudobiT sicocxlis pirvel dReebsa da kvireebSi aris fibrozi da kunTis ganuviTarebloba mozardebSi, izrdeba; SenarCunebuli kunTovani boWkoebi ganic­dian distrofias da Canacvldebian nawiburovani qsoviliT. zedapirul fascias aqvs Cveulebrivi agebuleba anTebiTi an nawiburovani cvlilebebis gareSe. Р.Ф. Башкинов-is azriT damaxasiaTebeli da mudmivi procesi aris ganuviTarebeli displaszi­uri boWkoebisagan glikogenis gamoyofa. Ggliko­genis susti fiqsacia SesaZlebelia iyos dakavSi­rebuli ganuviTarebel kun­To­van boWkoebSi fermen­tul ukmarisobasTan. neitra­luri mukopolisaqa­ridebi grovdeba Suamde­bare SemaerTebel qso­vilSi, rom­lis moculobac ZiriTadad izrdeba maTi dag­rovebis xarjze, es aris Suamdebare SemaerTebeli qsovilis cvlilebisa da mkerd-laviw-dvri-lisebri kunTis Sesqelebis ZiriTadi mizezi.

**klinikuri suraTi:** sicocxlis pirveli 10 dRis ganmavlobaSi gamoxa-tuli deformacia aRiniSneba avadmyofebis mxolod umniSvnelo nawils. umetesobas me-II kviris bolos da me-III kviris dasawyisSi kunTi Sua an qveda Sua nawilSi sqeldeba da am adgilSi xdeba ufro mkvrivi. mkerd-laviw-dvrilisebri kunTi TandaTan sisqeSi matulobs (sigrZeSi 2-4 sm, sisqeSi 1-1,5 sm), para­relurad matulobs Tavis dax­ri­loba Secvlili kunTis mxares da mcirdeba misi moZraobis mocu­loba.

avadmyofebis nawilSi mkerd-laviw-dvrilise­buri kunTis Sesqeleba da gamkvriveba raRac drois Semdeg TandaTan ganicdis regress da qreba (2-12 TvisaTvis), kunTi xdeba normaluri elastiuri konsistenciis. sxva avad-myofebSi (umcires SemT­xvevaSi) Sesqelebisa da gamkvrivebis SemcirebasTan erTad kunTi xdeba naklebad elastiuri, CamorCeba zrdaSi, Txeldeba da mkrivdeba.

bavSvis zrdasTan erTad mkerd-laviw-dvri­liseburi kunTi mokldeba, Tavis daxriloba, bru­ni da asimetria progresirebs da 3-6 wlisaTvis deformacia mniSvnelovnad izrdeba.

daTvalierebisas wina mxridan aRiniSneba kis­ris asimetria (Tavi daxrilia Secvlili kunTis mxares, odnav win da Sebrunebulia sawinaaRmdego mxares), Secvlili kunTis mxares mxris zemo na­wilis maRali dgoma, saxsrisa da Tavis qalis asimetria. umetes SemTxvevaSi gamoxatulia mkerd-laviw-dvriliseburi kunTis erTi an yvela fexis daWimva. avadmyofis ukana mxridan daTvalierebis dros aRiniSneba kisris, Tavis asimetria, misi da­xriloba da bruni, sqoliozi. dazianebuli mkerd-laviw-dvriliseburi kunTis eleqtroaRgzne­badoba daqveiTebulia.

Tandayolili kunTovani kisermrudobis mqone avadmyofebSi asimetria saxis, Tavis qalas, lavi­wis, xerxemlis mxridan aris SeguebiTi, kompensa­toruli.

Zalian iSviaTad gvxvdeba egreT wodebuli ormxrivi kisermrudoba, viTardeba orive mxares mkerd-laviw-dvriliseburi kunTis Tandayolili damoklebiT. aseT avadmyofebs Tavi gadaweuli aqvT ukan (amasTan kefa miaxloebulia zurgTan, xolo saxe mimarTulia zeviT), an daxrilia win ise, rom misi ukana gadaweva SeuZlebelia. amas garda, kunTebis araTanabari damoklebis gamo Tavi daxrilia gverdiT, misi moZraoba Zalian SezRu­dulia. operatiuli Careva gulisxmobs orTave mkerd-laviw-dvriliseburi kunTis erTdroul rezeq­cias. operaciis Semdgom periodSi mkurna­loba igivea, rogorc calmxrivi Tandayolili kisermrudobis dros, magram yelze TabaSiris dadebis dros avadmyofis Tavi fiqsirebuli unda iyos Sua xazze da kiseri mkveTrad gaSlil mdgomareobaSi.

trapeciuli da beWis amwevi kunTebis damok­lebis Sedegad ganvi-Tarebuli Tandayolili kiser­mrudoba gvxvdeba iSviaTad. am avadmyofebs Tavi gadaweuli aqvT ukan da Sebrunebulia sawinaaR­m­dego mxares, Sesa-bamisi beWi ramdenadme wamoweu­lia. mcire cvlilebebis dros - samkurnalo fizkultura; operaciuli mkurnaloba mdgomareobs kunTis Secvlili nawi-lis gakveTasa da rezeq­ciaSi.

frTiseburi kiseri - kisris erT-erTi iSviaTi Tandayolili deformacia, romelmac miiRo dasaxe­leba misTvis damaxasiaTebeli ZiriTadi simptomis mixedviT - kanis 2 naoWis arseboba, romelic daWi­mulia Tavisa da mxris zeda nawilis gverdiT ze­da­pirebidan samkuTxa afrebiseburad. xSirad naoWebi aris mxolod kanis duplikatura, magram zogjer maTSi aris ganlagebuli nervebi da sisxlZarRvebi. mkurnalobis mizniT iyeneben, plas­ti­kur operaciebs, romelic mdgomareobs kanis urTierTHSemxvedri samkuTxedebis gadaadgilebaSi.

klipel-feilis daavadeba \_ es aris SedarebiT iSviaTi, magram mZime deformacia. daavadebis safuZveli aris kisris malebis Sexorceba maTi raodenobis SemcirebiT, magram ar xdeba rkalebis Sexorceba. SesaZlebelia kisris I malis Sexorceba kefis ZvalTan. avadmyofebs aqvT mokle kiseri; zogjer iqmneba STabeWdileba, rom is ar aris. Tavis Tmebis sazRvari imde-nad dabalia, rom Tmis safari gadadis beWebze. Tavi mkveTrad daxrilia gverdiT da win, ise rom nikapi exeba gulmkerds, rogorc wesi aRiniSneba saxisa da Tavis qalas asimetria. kisris mkveTrad SezRuduli moZraoba da beWisa da zedamxris maRali dogma. Tanmxlebi simptomebi aris nervuli darRvevebi: nistagmi, parezi, dambla, mgrZnobelobis darRveva. mkurna­loba: adreul asakSi samkurnalo fizkul­tura, masaJi, makoregirebeli sayelos tareba. 5 wlis Semdeg SesaZlebelia qirurgiuli mkurna­loba.

kisris neknebi iwvevs kisris konfiguraciis Secvlas misi ganviTarebis mxolod mniSvnelovani xarisxis dros. ormxrivi anomaliis dros aRiniS­neba egreT wodebuli manuilovas simptomi: sqeli kiseri, konusiseburi formis, qveviT gafar­TovebiT da winaukana diametrSi ramdenadme gasqe­lebuli: mxrebi daweulia qveviT, warmoadgens kis­ris gagr­Zelebas, rac aZlevs avadmyofs selapise­bur saxes xSirad viTardeba kisris nawilis sqoliozi, ra­sac Tan erTvis kisermrudoba. zogjer kisris nek­nebi axdens zewolas laviwqveSa arteriaze. diag­nozis dazustebisaTvis gadamwyveti aris gamokv­le­vis rent-genologiuri meTodi. mkurna­lobis konse­r­vatiuli meTodi Cveulebriv araefeq­turia. mud­mivi tkivilebis arsebobisas, nervuli da sisxl­ZarRvTa sistemebis paTolo­giuri cvli­le­bebis dros naCvenebia operaciuli mkurnaloba, rac gu­lisxmobs neknis eqstraqcias Zvlissazrde­lasTan erTad.

solisebri kisris malebi (damatebiTi an ganuviTarebeli) aris mkveTri kisermrudobis ganvi­Tarebis yvelaze xSiri mizezi. arsebobs marjvena - an marcxena mxrivi kisermrudoba Tavis umniSv­nelo bruniT. saxis asimetria aris mniSvnelovani, Tavis aqtiuri moZraoba mkveTrad SezRudulia. mkurna-loba - samkurnalo fizkultura, masaJi da sayeloTi Tavis fiqsireba swor mdgomareobaSi.

nevrogenuli kisermrudoba calmxrivi mkerd-laviw-dvrilisebri kunTis dune dambla kunTis po­li­omielitis, difteriis, fesvebis travmuli da­zianebis dros kisris areSi malTaSua xvre­lidan ma­Ti gamosvlis adgilze, mogrZo tvinisa da zur­gis tvinis kisriszeda nawilis simsivneebis dros. calmxrivi kunTovani kisermrudoba bavSvTa cereb­ra­luri damblis dros, upirvelesad spas­tikuri hemiparezis dros. upiratesad calmxvrivi kunTo­vani gaRizianebisas, torsiuli distoniis farg­le­bSi neiroleptikebiT mkurna­lobis dros. damate­biTi nervis (N.Accessorus) calmxvrivi gaRi­zianeba Tavis qalas ukana fosoSi maRali wnevis dros. zogjer es aris mocemul nawilSi mocu­lobiTi procesis erTaderTi pirveli niSani (tvi­nis sim­sivne an cista, araqnoidaluri midamos cista) kiser­mrudoba labirinTis dazia-nebis dros (kom­pensatoruli). erT-erTi labirinTebisagan fun­q­ci­is cal-mxrivi amovardnis dros bavSvebi Tavs xrian dazianebul mxares. meZuZur bavSvebs uCndebaT aux­sneli genezis Rebineba mdgomareobis umniSvnelo Secvlis drosac ki (kveba, Sexveva), labirinTitis niSnebi aris agreTve Tavbruxveva, Rebineba, nis­tagmi. is SeiZleba ganviTardes oti­tis, meningitis, mastoiditis, warnoadgendes sefsis garTulebas, Sida yurSi sisxlCaqcevis dros, trav­mis an sefsis garTuleba saerTo momatebuli sisxlmdenobis fonze.

spastiuri kisermrudoba viTardeba kisris kun­Tebis uneburi SekumSvisa da maTi tonusis moma­tebis Sedegad, da xSirad ganixileba, rogorc eqs­t­rapiramiduli sistemis daavadeba, msgavsi hiper­kinezebis - torsiul spazms, aTetozis, ti­kebis.

grizelis daavadeba - kisermrudoba, rome­lic ganpirobebulia xerxem-lis irgvlivi kunTebis kontraqturiT, romelic emagreba wina borcvs, at­lantas da qalas, am kunTebis kontraqtura viT­ar­deba saylapavis ukana limfuri kvanZebis anTebis Sedegad. es aris SedarebiT iSviaTi daavadeba, gvx­v­deba sust bavSvebSi 6-11 wlis asakSi. Tavi daxri­lia erT mxares da ramdenadme Sebrunebulia meore mxares diferencialuri diagnostikisaTvis atare­ben rentgenografias.

kisermrudobis dermatogenuri forma viTar­deba kisris kanis vrceli dazianebis Sedegad.

kisermrudoba Rrma nawiburis Sedegad;

kisermrudoba tifis, malariis, difteriis, sifilisis dros mkerd-laviw-dvriliseburi kunTis mwvave da qronikuli anTebiTi procesebis Sedegad.

**mkurnaloba:** diagnozis dadgenis Semdeg auci­le­belia konservatiuli mkurnalobis dawyeba - makoregirebeli varjiSebi (Tavis daxra sawinaaRm­dego mxares da mobruneba damoklebuli kunTis mxares), Secvlili kunTis mcocav-damwoli da kisris janmrTeli nawilis ufro energiuli masaJi, kisris midamos gaTboba aparatiT da saTburiT; bavSvebSi, 6-8 kviris asakSi, tardeba eleqtrofo­rezi kaliumis iodidiT. bavSvi unda iwves lo­ginSi ise, rom kisris gamrudeba kidev ufro ar gaZ­lierdes, ar SeiZleba bavSvis daWera verti­kalurad droze adre. rekomendirebulia Tavis daWeris mizniT TabaSiris sawoli, - qudi Tasme­biT, sxvadasxva saxis naxvevebi da a.S. И.Г. Башкинов-i bavSvis dabadebis me-10-15 dRidan iyenebda lidazisa da hidrokortizonis ineqciebs. (aseTi mkurnalo­biT 5-6 Tvis asakisaTvis daavadeba gankurnebulia 92%-ze met SemTxvevebSi.)

klinikuri dakvirvebebis Tanaxmad, mkerd-laviw-dvrilisebri kunTis cvlilebebiT dabadebu­li bavSvebis umetesobaSi cvlilebebi qreba sico-cxlis I wlebSi, amitom principulad arasworia Tandayolili kisermru-dobiT dabade­buli bavSvebis operaciuli Careva sicocxlis I TveebSi.

operaciis Cveneba aris konservatiuli mkurnalobis araefeqturoba 1 welze zemoT asakis bavSvebSi, ukeTesia 3-4 wlis asakSi.

operaciidan 2-3 saaTis Semdeg Tavze akeTeben eqscentriul daWimvas naWris maryuJis saSualebiT. amasTan avadmyofis gulmkerds afiqsireben sawo­lis kidesTan. operaciidan 2-3 dRis Semdeg, roca naoperacieb areSi tkivili ar aris, xsnian daWi­m­vas da adeben TabaSiris sayelos naxevarkor­setTan erTad, 1 Tvis Semdeg TabaSiris sayelos xsnian Tu mkerd-laviw-dvriliseburi kunTebis fexebis uwyve­toba ar aRsdga da avadmyofs uWiravs Tavi swo­rad, iwyeben samkurnalo fizkulturas, fizio­Terapias, masaJs. Tu kunTis fexebis uwyvetoba aRsdga da Tavi daWerilia arasworad, TabaSiris naxvevs akeTeben mosaxsnels, atareben samkurnalo fizkulturas, masaJs, parafinoTerapias, talaxiT mkurnalobas, eleqtroforezs kaliumis iodiTa da novokainiT, naxvevs ronidaziT, xolo zogierT avadmyofebs ukeTeben lidazinis ineqciebs nawi­burovan SexorcebebSi, da aseve atareben piro­genalis ineqciebis kurss. nawiburovani Wimis (Tu is warmoiqmna) Camoya-libeba xdeba 4-5 TveSi.

**Tandayolili terfmrudoba**

Tandayolil terfmrudobas uwodeben terfis eqvino-varusul deformacias - mdgrad mimzidvel-momxrel kontraqturas, rome­lic dakavSirebulia terfis Sida da ukana kunTe­bisa da iogebis ganuviTareblobasa da damokle­bas­Tan. sayrden-mamoZravebeli aparatis ganviTarebis Tan­da­­­yo­lili mankebisagan yvelaze xSirad gvxdeba Tandayolili terfmrudoba (Tandayolili defor­maciebisa 35-38%-Si). biWebSi terfmrudoba orjer ufro xSiria, vidre gogonebSi. ormxrivi terf­mrudoba ufro xSiria vidre calmxrivi.

Tandayolili terfmrudoba \_ polieTiolo­gi­uri daavadebaa. eTiologiuri faqtorebia:

1. Canasaxis ganviTarebis da-rRveva meqanikuri faqtorebis ze-gavleniT (amnioturi Wimebis, Wip-la­ris, saSvilosnos kunTebis, si-msivneebis, mcire­wyli­anobis dros terfze zewolis gamo)
2. embrionis pirveladi Cana-sxis darRveva, ra­zec metyvelebs terfmrudobis xSiri Serwyma Tan­dayolil defeqtebTan – polidaqtiliasTan, kurd­Rlis tuCTan, mglis sasasTan da sxvasTan.
3. terfmrudobis Tandayolili forma dominanturia mamakacebis xaziT.
4. orsulTa paTologia toqsoplazmozis Sedegad;
5. inervaciis darRveva zurgis tvinis ce­nt­re­bis mxridan;

arCeven Tandayolili terfmrudobis or fo­rmas: tipiurs (-8%-Si) da atipiurs (20%-Si).

tipiuri formebi:

1. msubuqi \_ gvxvdeba iSviaTad da iolad ga­nkurnebadia;
2. rbilqsovilovani – e.w. iogovani formebi, viTardeba ufro xSirad, kargad gamoxatuli cximovani qsoviliTa da moZravi kaniT;

g) Zvlovani \_ roca naklebad moZravi kanis dros terfis gare nawilSi aRiniSneba Zvlovani wanazardebi (koWis Zvali, gadidebuli gare goji, me-V metatarzaruli Zvlis borcvi).

atipiur formebs miekuTneba arTrogripozis, amnionuri Wimis da sxva mizezebiT ganviTarebuli terfmrudoba.

**klinikuri suraTi:** bavSvs dabadebisTanave aReniSneba terfis araswori mdgomareoba. terfi deformirebulia: eqvinusi terfis moxra terfis guli-sken; supinacia - wamoweulia terfis Sida na­wi­li da daSvebulia gare; aduqcia - terfis wina nawilis mozidva; Rru terfi - terfis sigrZivi TaRis gadideba.

Tandayolili terfmrudobis dros terfis damaxasiaTebel mdgo-mareobas emateba rotacia SigniT, moZraobis SezRudva koW-wvivis saxsarSi. sxva sityvebiT, rom vTqvaT terfmrudoba aris ter­fis deformacia, rom-lisTvisac damaxasiaTebelia misi gadaxra wvivis sigrZivi RerZisagan Sign-iT. amasTan erTad aRiniSneba wvivis kunTebis atrofia, gansakuTrebiT hipo-plaziuria kanWis kun­Ti. koW-wvivis saxsarSi moZraoba mkveTrad SezRu­du­lia da SesaZlebelia mxolod Serxeva, es simp­to­mebi bavSvis zrdasTan erTad progresirebs, magram kiduris mniSvnelovani damokleba ar aRiniSneba.

bavSvis zrdasTan erTad viTardeba kiduris meoradi defor-macia. imis gamo, rom sayrdeni aris terfis zeda gare nawili, sadac yalibdeba koJiJi (korZi). xolo araswori datvirTva iwvevs wvivis Zvlebis Semotrialebas sigrZivi RerZis irgvliv. mZime SemTxvevebSi cvlileba gamoxatulia imdenad mkve­Trad, rom gare goji mimarTu-lia win, xolo qu­s­li exeba Sida gojs. muxlis saxsarSi viTardeba valgusuri deformacia. muxlis sa-xsari moSvebu­l­ia, siaruli – pata-ra nibijebiT, aramyari. SeiZleba iyos kunTis ’’mfrinavi’’ tkivilebi.

rentgenologiurad isazRvreba koWis Zvlis Tavis ramdenadme ga-daadgileba fexisgulis mxares. rentgenologiuri suraTi damokidebulia daavade­bis simZimeze.

**diferencialuri diagnozi** tardeba mis atipiur formebTan: arTro-gripozi - vlindeba zeda da qveda kidurebis saxs­rebis mravlobiTi kontraqturebis saxiT, romelic gamowveulia kunTebis mkveTri aplaziiT, vlindeba arTrogripozisaTvis damaxasiaTebeli kunTebis konturebis, kunTebis jgufebis reliefis gadaswo­reba da dazianebul saxsrebSi moZraobis SezRud­va. zeda kidurebze xSirad aRiniSneba iday­vis sax­srebis gamSleli kontraqturebi, mtevnis daWeriTi funqciis darRveva. qveda kidurebze sax­srebis kontraqturebi gamoirCeva didi mravalfe­rov­nebiT (momxreli da gamSleli, momzidveli da ganmzi­davi) da gvxdeba sxvadasxva mdgomareobaSi. kontra­q­turebis garda viTardeba barZayis amovard­niloba. xerxemali da tanis kunTebi ar ziandeba.

1. osten-sakenis varusuli kontraqturebis dros cvlilebebi terfis kunTebSi, iogebsa da ZvlebSi umniSvneloa. terfis gam-rudeba xdeba SedarebiT iolad.

2. rbilqsovilovani iogovani formebi gvxvdeba ufro xSirad. cvlilebebi Zvlebis mxriv umniS-vneloa. terfis mdgomareobis gas-worebis dros igrZnoba zambarise-buri winaaRmdegoba. defor­maciis erTmomentad sruli gasworeba SeuZlebe­lia.

3. Zvlovani formebi gvxdeba iSviaTad. ioge­bi­sa da kunTebis cvlilebebeTan erTad aRiniS­neba uf­ro gamoxatuli koWis Zvlis formis cvli­lebebi da misi Secileba win da gareT. doatera­lu­ri koWi aRwevs mniSvnelovan zomebs da xels uS­lis deformaciis gasworebas. deformaciis koreqciis mcdelobisas mcire asakis bavSvebSic ki iqmneba Zvlovani SewinaaRmdegebis SegrZneba.

**eTiologia da paTogenezi:** arsebobs Teoriebi, romelic xsnis Tanda-yolili terfmrudobis gan­viTarebas pirveladi Canasaxis mankis dros. meqa­nikuri Teoriebi, romlebic ukavSireben terfmru­dobis ganviTarebas saSvi-losnos RruSi nayofis araswor mdebareobas, nevrogenuri Teoriebi. Tanda-yolili terfmrudoba gamowveulia sxva­dasxva faqtorebiT: lateraluri an medialuri gojis Taviseburi formebiT da uCveulo ganla­gebiT, magram deformaciis es saxe gvxvdeba iSvi­a­Tad. xSirad gvxvdeba avadmyofebi, romelTac aRe­niSnebaT iogebis aSkara Sesqeleba, kunTebisa da myesebis atipiuri ganlageba da aseve xSirad dama­tebiT normaSi ararsebuli kunTebis ganviTa­reba, romlebic axdenen terfis supinacias. wonas­worobis funqciis darRveva supinatorebsa da pronatorebs Soris SeiZleba iyos Tandayolili terfmrudobis ganviTarebis ufro xSiri mizezi.

**paTologiuri anatomia:** koWis Zvali TiTqmis yovelTvis Secilebulia da misi mniSvnelovani na­wili mimarTulia gareT da win, amasTan yeli Se­b­runebulia SigniT da qveviT. misi kuTxe aRwevs 500 da mets, maSin roca normaSi zrda­sruli adamianis es kuTxe aris 12.30, xolo embri­onis - 35,70. koWis Zvlis grZeli RerZi daxrilia win da SigniT. koWis Zvlis zeda sasaxsre zedapi­ris naxevarmrudi mdebareobs ara sagitalur si­btyeSi, rogorc normaSi, aramed frontalurSi e.i. terfis fexisgulis da fexiszurgis moxra icvleba mi­si pronaciiTa da supinaciiT. aRiniSneba wvivis Zvlebis rotacia da sxva cvlilebebi.

**mkurnaloba:** Tandayolil terfmru-dobas mkurnalobda jer kidev hipokra-te. me-18-19 saukune­Si farTo gamoyeneba hpova sxvadasxva aparatebma da manqaneb-ma, romelic SemoTavazebuli iyo skarp­is, Stromeiris da sxvaTa mier. am mow-yobilobebis saSualebiT ZaldatanebiT asworebdnen terfis formasa da mdgo-mareobas.

me-19 saukunis II naxevarSi rigi qi-rurgebi: delori, tino da sxvebi awar-moebdnen forsirebul redresacias xe-liT narkozis qveS, ris Semdegadac afi-qsirebdnen terfs TabaSiris naxveviT.

**mkurna­loba**: meZuZur bavSvebSi iwye-ba dabadebidan me-7-10 dRes. mxolod Zalian ioli formebis dros xdeba gan-kurneba flanelis dolbandis imobili-zaciiT makoregirebeli varjiSebiTa da masaJiT. Cveuleb­riv iyeneben etapur TabaSiris naxvevebs, romelsac Tavdapirvelad cvlian Svidi dRis Semdeg, xolo Semdeg mkurnalobis 3-5 Tvis Tavze, terfis sa­Sualo fiziologiur mdgomareobaSi gamoyva­nisas me-9-12 dRes. naxvevis dadebis dros fexs xrian muxlis saxsarSi, aaxloeben ra kunTis mimagrebis wertilebs. zogi orTo-pedi adebs Taba­Siris na­xvevs terfsa da wvivze, sxvebi - moicaven muxlis saxsarsa da barZayis qveda mesameds. 6-7 TvisaTvis, xolo zogjer im asa-kisaTvis, roca bavSvi iwyebs siaruls umravles SemTxvevaSi xdeba sruli ga­nkurneba.

uSedego konservatiuli mkurnalobis SemTxve­vaSi, 2-14 wlis asakSi deformaciis recidivebis dros iyeneben operaciebs iogovan-myesovan aparat­ze zacepin-Sturmis meTodiT. operaciis Semdeg afiqsirebdnen fexs TabaSiris naxveviT hiperkoreq­ciul mdgomareobaSi. TabaSiris naxvevi edeba 1 TviT, Semdeg kidev 3 TviT. yvela meTodis swori gamoyenebis dros ter­fi 95%-Si iZens normalur formasa da funqci­as. 5%-s Seadgens is avadmyofebi, romelTac mniSvne­lovani deformaciis gamo esaWiroebaT operaciebi terfis Zvlebze.

terfmrudobis konservatiuli da operaciuli mkurnalobis dros farTod gamoiyeneba fizioTe­rapia (siTburi procedurebi, kunTis eleqtro stimulacia, ultrabgera da sxva) rbili qsovi­le­bis elastiurobis momatebisa da kunTebis gaZlie­rebisaTvis.

**muxlis saxsris deformacia**

muxlis saxsris deformaciebs miekuTvneba X-se­buri gamrudeba (genu valgum) da 0-seburi gam­rudeba (genu varum) miuxedavad imisa rom es gam­rudeba iTvleba datvirTvis Sedegad ganviTare­bul deformaciad, datvirTva aris mxolod meo­radi mizezi, pirveladi mizezi yvelaze xSirad aris epifizebis ganviTarebis darRveviT gamowveuli paTologiuri cvlilebebi.

**X-seburi kidurebi (Genu valgum)**

kiduris sigrZivi RerZi warmoadgens ara swor xazs, aramed imdenad gamrudebuls, rom barZayis Zvlebis medialuri rokebis erTmaneTTan Sexebisas, medialur gojebs Soris rCeba gansazRvruli intervali.

**eTologia:** sicocxlis 2-6 wlisaTvis norma­luri zrdis fonze SeiZleba ganviTardes sustad gamoxatuli fexebis X-seburi mdgomareoba, rac kompensatorulad iwvevs garegani terfmrudobis ganviTarebas, iogovani aparatis daqveiTebuli simkvrivis an didi datvirTvis (Warbi wonis) gamo. SeiZleba gaizardos fexis fizi­ologiuri gamrudeba, zogjer mniSvnelov­namde. garda amisa X-seburi fexebis mizezi SeiZleba iyos travmuli dazianeba.

**klinikuri suraTi:** RerZisagan gadaxris xarisxi isazRvreba santimet-rebiT, izomeba manZili medialur gojebs Soris erTmaneTs midebuli mux-lis saxsrebis mdgomareobaSi. bavSvis asakSi in­tervali 5-sm-mde iTvleba normad klinikurad xasiaTdeba Semdegi niSnebiT: erTmaneTTan SeerTe­buli muxlebiT da Sors darCenili medialuri gojebiT, maT Soris daSoreba miuTiTebs defor­maciis xarisxze. kvirisTavi mdebareobs ramdenadme gareT, fexebi aris mcired moxrili kontraqturis mdgomareobaSi, wvivi odnav rotirebulia gareT. siaruli aqvT uxerxuli, sirbilis dros bavSvi xSirad axvedrebs erTmaneTs muxlebs da ecema.

**mkurnaloba:** deformaciis msubuqi xarisxis dros 3-4 wlis asakSi mkurnaloba konservatiulia - kidurebis fiqsacia garegani artaSanis saSua­lebiT an makoregirebeli TabaSiris naxveviT, masaJi, varjiSi, zogadad gamajansaRebeli mkurna­loba. ufrosi asakis bavSvebSi deformaciis ufro maRali xarisxis dros naCvenebia barZayis Zvlis osteotomia, zogierT SemTxvevaSi erTdroulad keTdeba aseve didi wvivis Zvlis osteotomia. yve-laze xSirad iyeneben barZayis Zvlis dabal Z-sebur osteotomias (meta-fizis sazRvrebSi) an fanjrisebr osteotomias koCevis mixedviT. Oopera­ciis Semdeg adeben cirkularul TabaSiris naxvevs 4-6 kviris vadiT. Semdeg naxvevs cvlian ukana TabaSiris artaSaniT da niSnaven samkurnalo fi­zkul-turas, masaJs, fizioTerapiul procedurebs.

**0-seburi kidurebi (Cenu varum)**

saubari aris kiduris RerZis iseT gadaxraze, roca medialuri gojebis erTmaneTTan Sexebis dros BbarZayis Zvlebis medialur rokebs Soris rCe­ba gansazRvruli intervali.

**eTiologia:** bavSvis sicocxlis pirveli ori wlis ganmavlobaSi aRi-niSneba fiziologiurad fexebis 0-seburi mdgomareoba. zrdisa da RerZis ganvi­Tarebis normalurad mimdinare procesSi fexebis 0-seburi mdgomareoba swordeba, masTan xSirad yalibdeba X-seburi fexebi. araTanabari datvir­Tvis Sedegad varusuli gamrudeba SeiZleba gaZli­erdes. wvivis 0-seburi deformacia SeiZleba iyos travmuli dazianebis Sedegi. xSirad gvxvdeboda raqitis fonze.

**klinikuri suraTi**: normaluri RerZisagan gadaxris xarisxi isazRvreba santimetrebSi, izo­meba barZayis Zvlis medialur rokebs Soris man­Zili mityupebuli medialuri gojebis dros. Con­Cxis zrdisa da Camoyalibebis periodSi maqsi­mum 3 sm ganixileba, rogorc fiziologiuri. klini­kurad xasiaTdeba kidurebis gamrudebiT, romelic mog­vagonebs cifr 0-s. barZayebi amasTan imyofeba gan­zi­dul mdgomareobaSi da ramdenadme rotirebulia gareT, wvivebi terfis SigniT imyo­feba valgusur mdgomareobaSi.

mkurnaloba igivea, rac muxlis saxsrebis X-seburi gamrudebis dros. bavSvobis adreul asakSi gamoiyeneba varjiSi, zogad gamajansaRebeli da simptomuri mkurnaloba. gamoxatuli deforma­ciebis dros sxvadasxva saxis osteotomiebi.

**brtyelterfianoba**

brtyeli terfi erT-erTi yvelaze gavrcele­buli deformacia, romelic viTardeba, misi rog­orc sigrZivi aseve ganivi TaRebis Semcirebis an dadablebis Sedegad.

bavSvis terfi romelic iwyebs siaruls, ra­mdenadme momrgvalebuli da farToa, vidre ufro­si asakisa. mis medialur zedapirze sakmaod ganvi­Tarebuli kanqveSa cximovani qsovi-li qmnis sa­vseobis STabeWdilebas, ris gamoc terfi gveCveneba brtyeli. bavSvebs romlebic pirvelad dgebian fexze da iwyeben siaruls, terfi SeiZleba hqo­ndeT gadmobrunebuli, bruni ufro gamoxatu­lia, roca bavSvi dgas gareT rotirebul fexebze. es ar unda gaxdes gangaSis mizezi. pediatrma terfebis konfi-guracias yuradReba unda miaqcios mas Semdeg roca bavSvs ukve SeuZlia Tavisuflad dgoma da siaruli. terfi datvir-Tvis dros normaSi eyr­dnoba quslis Zvals, terfis I da V Zvlebis Tavs. terfis TaRis simaRles da dgomas uzrunvelyofen didi wvivis Zvlis wina da ukana kunTebi. amas garda TaRs amagreben TiTis momxre­li kunTebi (mokle da grZeli), terfis didi TiTis grZeli momxreli da gansakuT­rebiT terfis fascia da iogebi. supinatorebisa da iogovani aparatis Sesusteba iwvevs terfis medialuri kidis dawe­vas, brtyelterfianobis ganviTarebas.

brtyelterfianoba SeiZleba iyos Tandayo­lili da SeZenili. SeZenili aris travmuli, para­lizuri da statiuri warmoSobis.

travmuli brtyelterfianoba viTardeba ter­fis qsovilebis (Zvlebis kunTebis, iogovani aparatis) dazianebis Sedegad. yvelaze xSirad aseTi brtyelterfianoba viTardeba terfis Zvle­bis da gojebis motexilobis dagvianebuli Caswo­rebis Sedegad paralizuri brtyelterfianoba, rogorc wesi, aris gadatanili polomielitis Sedegi.Ppara­lizuri brtyelterfia-nobisaTvis damaxasiaTebe­lia terfis ZvlebSi aqtiuri moZraobis ararsebo­ba.

statiuri brtyelterfianoba aris brtyelter­fianobis yvelaze metad gavrcelebuli saxe. misi ganviTarebis ZiriTadi mizezi aris kunTovani tonusis sisuste da iogovani aparatis ukmarisoba. aseve fexze didxans dgoma gan-sazRvruli pro­fesiis adamianeb-Si xels uwyobs brtyelterfi­a-nobis ganviTarebas.

eTiologiuri faqtore­bisagan damoukideblad brtyel­terfia-noba erTvis terfis gareT gada-xras da am dros saubari aris brtyelvalgusur terfze.

**klinikuri suraTi:** sigrZivi da ganivi brtyelterfian­obis adreul simptoms miekuTvneba fexebis gadaR­la da kanWis (wvivis) kunTebis tkivili siarulis dros, gansakuTrebiT dRis bolos. daTvalierebis dros yuradRebas aqceven sigrZivi TaRis dadable­bas, wina nawilis gafar­Toebas da terfis pronir­ebas. avadmyofebi, romel­Tac awuxebs brtyelterf­ianoba, cveTen fexsacme­lis Sida nawils da quslis Sida mxares. brt­ye­l­ter-fianobis diagnostikisaTvis iyeneb­en plantog­ra­fias (anabeWdis miReba terfis fexis­gulis zedapirisagan), podometrias (terfis sima­Rlis pro­cen-tuli Sefardeba mis sigrZesTan), rentge­nografias.

**mkurnaloba:** brtyelterfianobis mkurnaloba bevrad ufro rTulia, vidre misi profilaqtika, amitom brtyelterfianobis ga­nviTarebis profi­laqtikisTvis aucilebelia racionaluri fexsa­cmlis tareba, samkurnalo fizkultura, fexSiSve­li siaruli araswor zedapirze da sxva.

dasawyisSi brtyelterfianobis mkurnaloba mima­rTuli unda iyos terfis kunTebis gamagre­bi­saken, risTvisac gamoiyeneba samkurnalo fiz­kultura (siaruli TiTis wverebze, quslebze, Cajdoma, joxze fexis gadacureba da sxva), Tbili abazanebi, masaJi. xSirad karg efeqts iZleva didi wvivis Zvlis kunTis riTmuli fara­dizacia. akrZalulia rbili fexsacmlis tareba.

zemoT xse­nebulTan erTad saWiroa supinatorebis tareba, romelsac deben Cveulebriv fexsacmelSi an orTo­pediuli fexsacmlis tareba gamoyvanili TaRiTa da aweuli quslis Sida kidiT.

brtyelterfianobis garTulebul SemTxvevaSi mkurnalobis mizniT xdeba TabaSiris naxvevis dadeba terfis supinaciis mdgomareobaSi (mozar­debSi).

Tu konservatiuli mkurnaloba ar iZleva Sedegs SeiZleba Catardes operaciuli mkurnaloba - mcire wvivis Zvlis grZeli kunTis gadanergva terfis medalur kideze, ganivi TaRis daWimva abreSumis ZafebiT. operaciis Semdeg adeben TabaSiris nax­vevs. operaciidan 6-8 Tvis Semdeg avadmyofebi 1 wlis ganmavlobaSi iyeneben orTope­diul fexsa­c­melebs.

10%-ze naklebi kuTxiT valgusuri gamrudebis dros koreqcia ar aris saWiro.

**ganivi brtyelterfianoba**

saubari aris terfis gafarToebaze terfis Zvlebis Tavebis daSorebis xarjze.

**eTiologia:** ganivi brtyelterfianoba viTa­rdeba TandaTan datvirTvis araswori Sefarde­bisas sxeulis masis, kunTebisa da iogovani apara­tis simkvrives Soris, romelic uzrunvelyofen te­rfis ganivi TaRis stabilizacias.

**klinikuri suraTi:** ganivi terfis dros izrdeba manZili terfis I-V Zvle­bis Tavebs Soris. gansakuTrebulad aris Seci­lebuli terfis I TiTis Tavi medialur mxares. terfis II-IV Zvlebis Tavi Secilebulia fe­xisgulis mxares da dama­tebiT ganicdis sxeulis mxridan datvirTvas, rac iwvevs mtkivneul koJiJis (korZis) ganvi­Tarebas. amas garda, matulobs terfis Ti-Tebis momxre­lebis daZabva, ris Sedegad isini iWeren araswor mdebareobas (CaquCiseburi, brWyaliseburi TiTebi).

**mkurnaloba.** tardeba mxolod konservatiuli: iniSneba varjiSebi ter-fisTvis, situaciisagan gamom­dinare gamoiyeneba fexsacmelSi supinatori. orTopediuli Ceqmebi xSirad xdeba aucilebeli terfis TiTebis araswori mdebareobis dros an Tu ganiv brtyelterfianobasTan erTad aris agreTve gare­gani terfmrudoba.

**Qqusliseburi terfi**

terfi qmnis wvetian kuTxes wvivis RerZTan da ar ixreba fexisgulis mimarTulebiT.

**eTiologia:** qusliseburi terfi SeiZleba iyos Tandayolili, Tumca mocemuli paTologia ar aris ganviTarebis manki, aramed viTardeba saSvilosnoSi nayofis anomaliuri mdebareobis Sedegad. Qqusli­seburi terfi SeiZleba iyos SeZenilic damblis an travmuli dazianebis Sedegad.

**klinikuri suraTi.** axalSobilebSi terfi Sei­Zleba iyos mkveTrad gadaxrili dorsuluri mi­marTulebiT, ikavebs ra mdebareobas didi wvivis Zvlis wina kidesTan. SeuZlebelia terfis gadaweva fexisgulis mxares pasi-uradac ki. axali damble­bis dros fexisgulis mimarTulebiT pasiuri moZ­raoba Tavda­pirvelad ar aris SezRuduli. Tanda­Tan, Sesaba­misi mkurnalo-bis Cautareblobis SemT­xve­vaSi Sei­Zleba moxdes momxrelebis gadagvareba gamSle­lebis ufro meti Zalis gamo da terfis araswori mdebareobis pasi-uri gasworeba xdeba SeuZlebeli.

**mkurnaloba:** axalSobilebSi (aris mxolod araswori mdebareoba) mdgo-mareobs redresirebadi TabaSiris naxvevis TandaTanobiT dadebaSi terfis moxris normalur poziciis aRdgenamde, rac umetes SemTxvevaSi miiRweva ramdenime kviris ganmavlo­baSi. xSirad sakmarisia mxolod ubralo arta­Sa­nis dadeba, rom dafiqsirdes terfi sa­winaaRmdego poziciaSi.

SeZenili qusliseburi terfis dros xdeba operaciuli Careva rbil qsovilebsa da Zvlebze, SesaZlebelia agreTve Ramis artaSanebis an orTo­pediuli fexsacmelis gamoyeneba.

**cxenis terfi**

terfi wvivis RerZTan qmnis gluv kuTxes da SeuZlebelia dorsalur mimarTulebaSi gadaadgi­leba.

**eTiologia:** umetes SemTxvevaSi cxenis terfi viTardeba kanWis samTava kunTis dune da­mblis Sedegad. spastiuri damblebis dros is viTardeba terfis TiTebis momxrelebis Zalebis funqcionaluri upiratesobis Sede-gad. is SeiZleba iyos fexis araswori imobilizaciis Sedegi.

**klinikuri suraTi.** SeuZlebelia terfis aqti­uri mozidva iseT mdgomareobaSi, roca wvivis RerZTan iqmneba pirdapiri kuTxe. paTologiuri mdgomareobis mizezis da aseve xangrZlivobis gaT­valiswinebiT amis gakeTeba SeuZlebelia pa­siuradac ki (antagonisti kunTebis gadaWimva da kontraqtu-ra). gadaadgilebis dros avadmyofi ede­ba iataks terfis dakiduli wina nawiliT.

**mkurnaloba:** axali damblebis dros Cveu­leb­riv mkurnalobasTan erTad aucilebelia orTope­diuli saSualebebis gamoyeneba, romelic afiqsi­reben terfs wvivis RerZTan swori kuTxiT (Ramis artaSani qusliseburi terfis dros). Tu SeuZle­belia pasiuri koreqciis Catareba saWiroa terfis paTo-logiuri mdebareobis TandaTanobiT Seswo­reba TabaSiris redresirebadi naxveviT, xolo Sem­deg Ramis artaSanebis gamoyeneba. siarulisaTvis gamoi-yeneba Wimebi qusliseburi terfisaTvis, ter­fis artaSani, orTopediuli fexsacmeli an banda­Ji, aqilevsis myesis operaci­uli dagrZelebis gziT SeiZleba miRweuli iqnes kunTovani wonasworobis aRdgena SesaZlebelia agreTve koW-wvivis saxsris arTrodezis Catareba terfisaTvis funqciurad ufro xelsayreli mdebareo­bis Sesaqmnelad.

**Rru terfi**

terfis sigrZivi TaRi gamoxatulia mkveTrad, ris xarjze is Cans damoklebuli.

**eTiologia:** Rru terfi SeiZleba iyos Tandayolili da SeZenili damblis Sedegad.

**klinikuri suraTi.** saxsris sigrZivi RerZis konturis amaRlebis Sede-gad terfis zedaprze isinjeba I soliseburi Zvali. ris Sedegad viTar­deba maRali TaRi. Cveulebriv fexsacmlis tarebis dros Cndeba tkivili zewo-lis Sedegad; ufro mZime darRvevebisa da terfis ganivi TaRis gafar­Toebis (Rru terfi brtyel irib TaRTan erTad) Sedegad, zogjer ki terfis TiTebis brWyali­seburi mdgomareobis gamo sxeulis masis zewolis Sedegad, SeiZleba gaCndes mniSvnelovani tkivi­lebi.

**mkurnaloba.** aucilebelia samkurnalo fiz­kulturasTan erTad swrafi zrdis periodSi gamoyenebuli iqnas safenebi, romelic iseve rog­orc terfmrudobis dros, ar aZleven sigrZiv RerZs, raRac gansakuTrebul formas, aramed mide­bu­lia quslis Zvals da terfis distaluri nawi­ls, romelic xels uwyobs TaRis dadablebas sxeulis masis zewolis xarjze. didebisaTvis rekomendirebulia safenebi fexsacmelSi an orTo­pediuli fexsacmlis tareba.

operaciuli Careva naCvenebia mxolod mniSvne­lovani deformaciebis dros.

**namglisebri terfi**

namgliseburi terfi viTardeba terfis Zvle­bis mozidvis Sedegad.

**eTiologia.** namglisebri terfi aris upira­tesad Tandayolili paTo-logia, is SeiZleba gani­xilos rogorc terfmrudobis saxesxvaoba. ar aris gamoricxuli mocemuli deformaciis ganviTareba travmis Sedegadac.

**klinikuri suraTi.** terfis Zvlebis mozidva terfis zurgis mxris mi-marT SeiZleba gamoxatuli iyos sxvadasxva xarisxiT, razec aris damokide-bu­li pasiuri koreqciis Sedegi. datvirTva iwvevs tkivils.

**mkurnaloba.** Tandayolili deformaciis dros unda daiwyos dabade-bidanve. amisTvis unda daedos TabaSiris redresirebadi naxvevi. rogorc wesi im droisaTvis roca bavSvi iwyebs fexze dgomas da siaruls defeqti bolomde gankurnebulia. winaaR­mdeg SemTxvevaSi gamoiyeneba Ramis artaSane­bi terfis mimzidveli supinatorebiT. gamonaklis Sem­TxvevaSi mogvianebiT SeiZleba saWiro gaxdes or­Topediuli fexsacmeli.

**quslis Zvlis dezi**

quslis Zvlis borcvis qveda zedapirze vi­Tardeba deziseburi Zvlovani wanazardebi.

**eTiologia.** quslis dezi ganixileba rogorc myesovani boWkoebis mima-grebis adgilis degene­raciuli cvlilebebi, romlebic funqciurad gada­tvirTulia. gadatvirTva viTardeba terfis sigr­Zivi TaRis da wnevis Sedegad, rac ganapro­bebs fexisgulis kunTebis daZabvas.

**klinikuri suraTi.** umetes SemTxvevaSi avad­myofebs Civilebi ara aqvT. cvlilebebi mJRavndeba rentgenologiuri gamokvlevebis dros. zogjer SeiZleba iyos gardamavali adgilobrivi tkivili quslis areSi zewolis Sedegad.

**mkunaloba.** mcirexnian imobilizaciasa da saTburebTan erTad mwvave tkivilebis dros iyene­ben mokletalRovan dasxivebas, aseve adgi­lob­rivad akeTeben anTebis sawinaaRmdego da damamSv­i­d­e­be­l ineqciebs. amas garda, terfi unda iyos Ta­vi­sufali datvirTvisagan kargad morgebu­li or­Tope-diuli saSualebiT, romelic xels uwyobs TaRis koreqcias da kunTebis daZabulobis Semci­rebas. amasTan miiRweva datvirTvis gadaa­dgileba terfis sigrZiv TaRze. Zlieri adgi­lobrivi tki­vilis dros SeiZleba gamoyenebuli iqnes mtkiv­neul wertilebSi kargad morgebuli orTopediu­li Casafenebi. operaciuli mkurnaloba aucile­beli aris mxolod gamonaklis SemTxveveb­Si.

**terfis didi TiTis valgusuri**

**deformacia**

**(Hallux valgus)**

saubaria terffalangis saxsarSi terfis didi TiTis lateralur mimarTulebiT gadaxraze. mas­Tan dakavSirebiT terfis didi TiTis momzidavi ku­n­Tis myesebis gadaadgilebas Sida mxridan fexi­sgulis mxrisaken.

**eTiologia.** terfis didi TiTis valgusuri de-formacia aris ganivi brtyelterfianobis Sede­gi, rac ufro Zlierad aris gamoxatuli Rer­Zi­sagan didi TiTis gadaxra, ufro mniSvnelovnad icvleba TiTis momxrelebisa da gamSlelebis Wim­is mimarTuleba.

**klinikuri suraTi.** pacien­tebi upirveles yovlisa uCivian tkivils, romelic Cndeba terfis I metatarza-luri Zvlis Tavis midamoze zewolis dros, rac uf­ro gamrudebulia didi TiTi miT ufro metad aris gada-xrili fe­xisgulis mxares momxreli kun­Tis myesi. amis Sedegad mniSvne­lovnad mcirdeba Zvlis mocemul areSi rbili qsovilebi, xolo xangrZli­vi dat­virTvis dros Cndeba lorwovani CanTa. kani te­rfis Zvlis Tavze icvi-Teba, xde­ba atrofiu­li da mgrZnobiare sicivis mimarT. zemoT xsene­buli deformacia iwvevs II da III Ti­Tebis gada­nacvlebas zeviT an I TiTis qveviT. TiTebis erTma-neTTan Sexebis adgi­lebSi warmoiqmneba koJiJi (korZi).

**Mmkurnaloba.** dasawyisSi konservatiuli, misi Ziri-Tadi amocana aris terfis didi valgusuri defor-maciis an misi Semdgomi ganviTarebis pro­filaqtika. am mizniT naCvenebia samkurnalo fizku­ltura, fexSiSveli siaruli, safenebis da Ramis artaSanebis gamoyeneba, orTo­pediuli fexsacmelis tareba.

bevr SemTxvevaSi daavadebis progresirebis SeCereba ar xerxdeba, maSin saWiro xdeba ope­ra­ciuli mkurnaloba. asakis, deformaciis xarisx­is, sax-sris didi TiTis degeneraciuli cvlile­bebis gaTvaliswinebiT irCeva ope-raciis meTodi (koCevis, aniSenkos mixedviT an soliseburi reze­qcia).

**terfis CaquCisebri da brWyalisebri TiTebi**

saubroben ra terfis CaquCisebur TiTebze mxedvelobaSi aqvT TiTebis moxrili mdgomareoba distalur da gaSlili falangTaSua da terf-falangis saxsarSi.

brWyaliseburi ewodeba mdgomareobas TiTebs Zlieri ga­SliT terf-falangis da moxriT falangebSua sa­xsrebSi.

**eTiologia.** deformacia ganpirobebulia te­rfis TiTebis momxrelebis momatebuli daZabviT sigrZivi TaRis dadablebis Sedegad. CaquCiseburi TiTebi yvelaze xSirad viTardeba terfis de­fo­rmaciis Sedegad yvela sxva daavadebebis dros: ce­rebruli spastiuri damblis dros, poli­omielitis Semdeg, Tandayolili an statiuri brtyelte­rfianobis dros, mielodis-plaziis dros da sxva,

**klinikuri suraTi:** tkivili saxsrebis distalur midamoSi dorzalur mxares da terfis TiTebis wverSi, aseve korZi (koJiJi) meqanikuri gaRizi-anebis Sedegad.

**mkurnaloba.** konservatiuli: iniSneba samku­rnalo fizkultura, safe-nebi fexsacmelSi, rekome­ndirebulia fexSiSveli siaruli. mdgradi defo­rmaciis dros aucilebelia operaciuli mkurna­loba.

**Hallux malleus**

CaquCisebri deformacia xasiaTdeba terfis didi TiTis Zlieri moxriT falangTaSua da TiTebis gaSliTi terf-falangis saxsarSi.

**eTiologia.** es deformacia ganpirobebulia terfis didi TiTis momxrelebis momatebuli daZabviT sigrZivi TaRis dadablebis dros.K

**klinikuri suraTi.** tkivilebi viTardeba, rogorc falangTaSua saxsris midamoSi dorsa­luri mxridan, aseve didi TiTis bolo falangze Cveu-lebrivi fexsacmelis tarebis dros fexsacme­lis daWeris adgilebSi viTar-deba (korZi) koJiJi.

**mkurnaloba**. sasurvelia momxrelebis daZabulobis moxsna safenebis saSalebiT. amis garda aucilebelia terfisaTvis orTopediuli varjiSis Catareba. Tu SeuZlebelia deformaciis Sesworeba pasiurad, naCvenebia ope-raciuli mkurnaloba.

**Hallux rigidus**

saubaria terfis didi TiTis terf-falangis saxsris rigidulobaze.

**eTiologia:** daavadeba viTardeba terfis didi TiTis terf-falangis saxsarSi degeneraciuli cvlilebebis (madeformirebeli arTozi) an trav-mis Sedegad.

**klinikuri suraTi**. quslidan TiTebisken terfis gadacurebis dros vi-Tardeba tkivili. damatebiT miTiTebul midamoSi SeiZleba ganvi­Tardes anTebiTi reaqcia.

**mkurnaloba.** gamoiyeneba specialuri safenebi, orTopediuli fexsacme-li an fexsacmelSi Casafeni mowyobilobebi. iniSneba mokletalRovani dasxiveba da mocemul midamoSi sisxlis mimoqcevis gasa­umjobesebeli saSualebebi. sasurveli efeqtis ararsebobis dros naCvenebia operaciuli mkurna­loba.

**tanadobis darRveva**

adamianis tanadoba isazRvreba menjis mdebare­obiT, xerxemlis svetis mrudebis da Tavis mdeba­reobiT tanTan mimarTebaSi. yvela adamianis tana­doba cvalebadia. is SeiZleba iyos Tavis­ufali (kunTebis sruli modunebis dros) da daZabuli.

orive ukiduresi mdgomareobis sazRvari mdgomareobs organizmis funq-cionaluri Sesa­Z­leblobebis farglebSi, romelic miiRweva sa­yrdeni apara-tis pasiuri da aqtiuri moqmadebis Sedegad. pasiur sayrden aparats miekuT-vneba Zvlo­vani ConCxi da iogovani aparati. aqtiurs miekuT­vneba kumSvadi funqciis mqone kunTovani aparati. memkvidroebiTi faqtori, konstitucia da asaki moq­medebs aqtiuri da pasiuri sayrdeni aparatis mdgomareobasa da SesaZleblobaze da gansaz­Rvraven tanadobas.

memkvidroebiTi ganwyoba ganapirobebs xerxem­lis ganviTarebis Tandayo-lil anomaliebs, maga­liTad malebis displazia. xerxemlis unari aita­nos datvirTva SeiZleba moeqces endokrinuli dar­Rvevebis zegavlenis qveS. konstitucias aqvs didi mniSvneloba masis simZimis gadanawilebis xarjze. tanadoba Sades mixedviT aris gamoxatuleba da brZolis maStabi simZimis Zalasa da sxeulis pir­dapir mdgomareobas Soris.

yovel asakSi xerxemlis svets aqvs tipiuri fo­rma da SeuZlia gansaz-Rvruli datvirTvis atana. axalSobilis xerxemlis sveti TiTqmis sworia. fizioligiuri mrudi Cndeba fexze dgomisa da siarulis pirveli mcde-lobis dros. amitomac aris, rom patara bavSvi iwyebs fexze dgomas mux-lebsa da menj-barZayis saxsarSi moxrili fexe­biT. sxeulis proporciebi asakTan erTad icvleba midrekileba moxrilobaze unda ganixi­los orga­niz-mis ganviTarebis fazebTan kavSirSi.

adreuli bavSvo­bis asakSi bav-Svi swavlobs siaruls vertikalur mdgomareobaSi, tanadoba daZabulia, iqmneba fexe­bis fiziologiuri X-sebri gamrudeba.

sicocxlis 5-7 wlebSi: icvleba sxeulis pro­porciebi, yalibdeba xerxemlis fiziologiuri mrudi, Cndeba tanadobis daZabuli da mo-dunebuli saxeebi, menjis wina kide iweva.

sicocxlis 7-11 wlebSi: miiRweva aRnagobis harmoniuloba, xdeba tanadobis stabilizacia.

sqesobrivi momwifebis I faza (sicocxlis 11-12 wlebSi) xasiaTdeba daCqarebuli zrdiT, tanadobis labilurobiT midrekili dar-Rvevebisaken.

sqesobrivi momwifebis IIOfaza (12-16 wlebSi) ConCxis momwifeba, harmoniuli sxeulis aRnagobis Camoyali-beba.

sqesobrivi momwifebis periodSi zrdis tempi mkveTrad izrdeba, gogo-nebSi zrdis maqsimaluri tempi aris 12 wlis asakSi da Seadgens saSualod 9 sm-s, biWebSi 14 wlis asakSi da Seadgens 10 sm-s. bavSvobisa da siymawvi-lis asakSi SeZenili tanado­bis darRveva iwvevs xerxemalze an mis garkve-ul areze zewolis araTanabar ganawilebasa da gada­tvirTvas, ris Sedega-dac didebSi viTardeba degeneraciuli cvlilebebi da spondilozi.

tanadobis darRveva mavne Cvevebis Sedegad SeiZleba gamoswordes aqti-uri kunTovani daZa­bulobiT, mdgomareobis defeqti eqvemdebareba pasiur koreqcias, xolo deformaciebi ara. termini “tanadobis darRveva” niSnavs mdgomareobis de­feqtsa da deformaciebs (fiziologiuri mrudebis gaZli-erebas an gasavadebas). termini “tanadobis aras­tabiluroba”, igivea rac tanadobis sxvadasxva dar­Rveva. tanadobis darRvevis ZiriTad saxeebs mie­kuTvneba:

1. hiperlordozi
2. kifozi
3. brtyeli zurgi

**hiperlordozi**

xerxemlis svetis fiziologiuri simrudeebi gaZlierebulia.

**eTiologia:** sxeulis aRnagobis pirveli cvli­lebebis droisaTvis men-jis wina nawili kidev Camoweulia. lordozi SeiZleba ganviTardes sxva paTologiebis Sedegad (magaliTad barZayis Tanda­yolili ormxrivi amovar-dnilobis an menj-barZayis saxsris momxreli kontraqturebis dros).

**klinikuri suraTi**. xasiaTdeba gamoxatuli kisrisa da welis lordo-ziT da gaZlierebuli ki­foziT. kunTebis gadaWimvis Sedegad mocemuli pa­To­logiis dros SeiZleba ganviTardes tkivilebi zurgis areSi. datvirTvis atanis unari xerxemlis svetis mxridan mcirdeba.

**mkurnaloba.** mimdinareobs konservatiulad: tardeba specialuri varji-Sebi, samkurnalo curva; gamoiyeneba makoregirebeli TabaSiris sawoli, iniSneba vitaminebi da mzis abazanebi.

mxolod calkeul SemTxvevaSi, xerxemlis zo­maze meti simrudis koreqciisaTvis gamoiyeneba jvariseburi bandaJi an korseti.

**kifozi**

xerxemlis Tanabari gamrudeba gulmkerdis areSi ukana mxares gamo-burculobiT.

**eTiologia.** am anomaliis mizezi SeiZleba iyos menjis daxriloba ukan an welis V malis ganviTarebis Tandayolili manki. kifozi SeiZleba gan-viTardes agreTve raqitis, Soierman-maus daavade­bis an sayrdeni qsovilebis ganviTarebis ukmariso­bis Sedegad.

**klinikuri suraTi.** gulmkerdis deformacia, kisrisa da welis lor-dozi daqveiTebulia, Tavi da mxrebi CamoSvebulia winisaken, muceli gamo­weulia win. kunTovani daZabulobis Sedegad SeiZ­leba ganviTardes tkivi-lebi zurgSi; xerxe­mlis gulmkerdisa da welis areSi degeneraciuli cvli­lebebi SeiZleba iyos Zlierad gamoxatuli.

**mkurnaloba.** ZiriTadad konservatiulia. sam­kur­nalo fizkulturasTan erTad kompleqsSi Sei­Zleba gamoyenebuli iqnes orTopediuli korsetebi.

**brtyeli zurgi**

xerxemlis fiziologiuri simrudeebi daqve­iTebulia (gasavadebulia).

**eTiologia**. mocemuli paTologiis ganviTa­rebis mizezebi SeiZleba iyos menjis wina kidis maRali dgoma, welis V malis ganviTarebis ano­ma-lia an raqiti.

**klinikuri suraTi.** xasiaTdeba xerxemlis gulmkerdisa da welis mida-moebis simrudeebis daq­veiTeba, Tavi daWerilia sworad an odnav daxri­lia. xerxemlis aseTi formis dros aqtiuri say­rdeni aparati ganicdis momate-bul, xolo zurgis kunTebi datvirTvis ukmarisobas. SeiZleba ganviTa­rdes tkivilebi zurgis midamoSi.

**mkurnaloba:** ZiriTadad tardeba samkurnalo fizkultura, riTac Zli-erdeba sxeulis kunTebi. amis garda sasargebloa curva. Zili rekomendi-rebulia magar da brtyel sawolze.

**sqoliozi**

sqoliozi ewodeba xerxemlis svetis gve­r­diT gamrudebas, rom­e­lsac Tan axlavs malebis torsia.

aRini­Sneba er­Ti mr­u­di (C - magvari sqo­liozi), ori urTi­erT­ sawinaaR-mdegod mi­marTuli gamrudeba (S-magvari skoliozi), an sami mrudi - sammagi (sqoliozi). sqoli­o­z­is yovel saxes gamru­debis gamobur­cu­lo­bis, mimar­Tule­bis mi­xe­d­viT aqvs gan­saku­Trebuli mniSvneloba (magaliTad, marcxena mxrivi (C-magvari sqoliozi). xerxemlis ramdenime gamrudebis dros ufro mniSvnelovnad iTvleba pirveladi, naklebad gamoxatulia meoradi. sqo­li-ozis zomebi dgindeba rentgenologiurad. miRe­buli sidideebi gamoixateba gradusebSi.

**eTiologia.** sqoliozi SeiZleba iyos Tandayo­lili da maSin adgili aqvs erTi an ramdenime malis ganviTarebis anomalias.

ganviTarebis mankebi unda ganirCes sqoliozi­sagan, romelic viTarde-ba axalSobilebSi saSvi­los­noSi nayofis araswori mdebareobis gamo. WeS­ma­riti sqoliozi SeiZleba ganviTardes tanis ku­nTebis sisustis Sedegadac.

araswori tanadoba da xerxemlis gverdiTi gamrudeba SeiZleba ganpi-robebuli iyos qveda kidurebis sxvadasxva sigrZiT (statistikuri sqolio-zi), xolo gverdiTi gamrudeba \_ tkiviliT (tkivilis sqoliozi), magali-Tad iSialgiis dros.

paralizuri sqo­liozi viTardeba tanis kunTebis parezis dros, amas-Tan misi ganviTare­bis dominantur mize­zad adre iTvleboda ba­v­Svobis spina-luri da­m­bla.

iSviaT SemTxvevaSi aris WeSmariti sqoli­ozi, romelic ganpiro­be­bulia tanadobis xan­grZlivi darRveviT, ga­n­sakuTrebuli samuSao pirobebis gamo (profe­sionaluri sqoliozi).

skolis asakis bav­SvebSi statistikuri sqoliozis yvelaze ga­v­rcele-buli forma ar­is e.w. saskolo sqoli­ozi. mis ganviTarebaSi mniSvneloba eniWeba ku­n­Tebis gadatvirTvas asimetriuli datvirTvis Sedegad skolis merxisa da bavSvis simaRlis Seusabamobis dros, merxTan araswori jdomis dros.

sqoliozi SeiZleba ganviTardes malebis motexilobebis Sedegad (trav-muli sqoliozi).

did jgufs Seadgens egreT wodebuli genui­luri, an idiopaTiuri sqo-liozebi, amasTan maTi ganviTarebis mizezis dadgena jer ar xerxdeba. savaraudod arsebobs mTeli rigi faqtorebisa, romlebic kompleqsurad mo-qmedeben ConCxis ganvi­Tarebis garkveul biologiur fazebze.

sqoliozis klinikuri suraTi:

\_ beWis kuTxeebis da mxris zeda nawilis asimetria;

\_ xerxemlis svetis gulmkerdis areSi gamoburcul mxares mxris maRa-li dogma;

\_ menjis midamoSi gamoburcul mxares welis samkuTxedis gabrtye-leba da CaRrmaveba xerxemlis svetis welis areSi maqsimaluri gamrudebis sawi­naaRmdego mxares.

\_ gulmkerdis gamoburculoba dorsaluri mimarTulebiT. (neknTa dor-saluri kuzi) da misi Sezneqa diagonalze ventralur mxares;

\_ welis kunTebis gamoberiloba gamoburcul mxares (welis “torsiu-li” morgvi, baliSi).

neknTa dorsaluri kuzi da torsiuli morgvi gansa­kuTrebiT mkafiod Cans win daxris dros.

retngenogramaze Cans malebis mdebareobisa da formebis cvlilebebi. malebis sxeulebi Cazneqil mxares ufro brtyelia, vidre gamo­burcul mxa-res, xolo gamrudebis mwvervalze is gamoxatulia ufro mkafiod. deforma-ciis simZimisa da klinikuri gamovlinebebis mixedviT arCeven skoliozis 4 xarisxs.

I xarisxi - xerxemlis svetis mcire gverdiT gadaxra torsiis dasa-wyisi stadia torsia rentge­no­gramaze isazRvreba, Sua xazidan wvetiani morCebis mcire gadaxris saxiT. gamrudebis pirveladi kuTxe Seadgens ara-umetes 100-s.

II xarisxi - xerxemlis svetis mniSvnelovani gadaxra frontalur sibr-tyeSi gamoxatuli torsiiT. rentgenogramaze Cans malebis sxeulebis de-formacia gamrudebis mwvervalis doneze. gam­rudebis pirveladi kuTxe Sead-gens 11-400-s klini­kurad vlindeba kunTovani baliSi (morgvi) xerxe­mlis svetis torsis gamo da iwyeba kuzis Camoya­libeba.

III xarisxi - gamoirCeva xerxemlis svetis ufro gamoxatuli deforma-ciiT, xerxemlis kuzis arsebobiT, gulmkerdis deformaciiT. gamrudebis pirveladi kuTxe Seadgens 40-600-s. gamrudebis mwvervalSi aris soliseburi malebi.

IV xarisxis - tanis mZime deformacia xerxem­lis svetis gulmkerdis midamos kifosqoliozis ganviTarebiT, da aseve wina mxares kuzis ganvi­Ta-rebiT. rentgenologiurad isazRvreba gul­mkerdis malebis soliseburi de-formacia. ZiriTadi gamrudebis kuTxe aRwevs 60-900-s.

xerxemlis svetis gamrudebis kuTxis gansa­zRvra xdeba kobas da fergiusonis meTodis mi-xe­dviT, kobes meTodi da-fuZnebulia kuTxis gansazR­vraze, romelic Seq-mnilia bolo ori neitraluri maliT. fergiusonis meTodi dafuZne-bulia xerxe­mlis svetis gamrudebis rkalis sididis gansa­zRvraze kuTxiT, romelic Seqmnilia neitraluri malebisa da gamrudebis mwvervalze mdebare malas Soris gavlebuli swori xaziT.

amis garda SesaZlebelia menjis kompensa­toruli gamrudeba, romelic vlindeba sxvadasxva simaRleze mdebare TeZos frTebiT. sqo­liozis gan-viTarebis Teoriebi metad mrava­lfe­rovania. bavSobaSi es darRvevebi Cve-ulebriv ar mimdinareobs tkivilebiT, arc moZraobis Sez­Rud­viT. gogo-nebSi, Tu gamrudeba Zalian SesamCne­via, xSiria fsiqiuri travmebi. ufro-sebSi sqoli­ozis xarisxis mixedviT degeneraciuli cvlile­bebis Sedegad SeiZleba ganviTardes sar­tylisebri tki­vilebi, nervebis fesvebis gaRizia­ne-bis gamo. procesSi gul-sisxlZarRvTa sistemisa da fil­tvebis CaTrevis dros viTardeba organo­ebis komp­resia, rac iwvevs Sromisunarianobis Sez­Rud­vas.

**mkurnaloba** mravalmxrivi da individualuria; is damokidebulia xer-xemlis gamrudebis xarisxze, pacientis asakze, simptomatikis ganviTarebis mize­zebsa da gamoxatulebaze, aseve avadmyofis saerTo mdgomareobaze. es faqtorebi gansazRraven aseve mkurnalobis Sedegs, Tumca principialurad unda gamovideT iqidan rom ukve Camoyalibebuli defor­macia aRar ganicdis ukuganviTarebas e.i. ar eqvem­debareba mkurnalobas da mkurnaloba mimarTu-lia mxolod procesis SeCerebisaken im mdgomareobaSi, romelSic imyofe-boda diagnozis dasmis dros pacienti.

Tavdapirvelad iyeneben konservatiul meTo­debs (Zili magar da brtyel sawolze ubaliSod, samkurnalo fi­zkultura, masaJi, fizioprocedurebi, curva da sxva saSualebebi romliTac miiRweva xerxemlis kunTovni karkasis gamagreba).

yuradRebis centrSi unda iyos fsiqosomaturi mkurnalobis sakiTxi, aseve aucilebelia daziane­bis adgilSi sisxliT momaragebisa da nivTiere­baTa cvlis gaaqtiureba. efeqtis gasaumjobeseb­lad SeiZleba damxmare orTopediuli teqnikuri saSua­lebebis gamoyeneba (makoregirebeli sawolebi Sa­des mixedviT, blauntis an Stagnaris korsetebi da sxva). maTi gamoyenebis mizani aris dazianebul organoze an kidurebze datvirTvis Semcireba. medi­kamentozuri mkurnaloba iniSneba garTulebe­bis mixedviT. sakvebi unda iyos srulfasovani da vitaminebiT mdidari. Tu cnobili aris sqoliozis ganvi-Tarebis mizezi, yvela Zala unda iyos mima­rTuli misi aRmofxvrisaTvis. Zlovani ConCxis momwifebis dasrulebis Semdeg an Sesabamisi asakis dad-gomis dros roca SesaZlebelia mkurnaloba operaciuli meTodiT tardeba operacia.

**Zabriseburi (mewaRis) mkerdi**

am xasiaTis deformaciisaTvis dama­xasiaTe­belia mkerdis Cazneqa kaudaluri nawilis midamo­Si.

**eTiologia.** saubaria ganviTarebis mankze.

**klinikuri suraTi.** mkerdis qveda nawilis Cazneqis Sedegad yalibdeba gulmkerdis metnakle­bad gamoxatuli Zabriseburi forma. Zlieri de­for­maciisas Sinagani organoebis gadaadgilebis dros SeiZleba ganviTardes funqcionaluri dar­Rve­vebi gulisa da filtvebis mxriv.

**mkurnaloba:** upirveles yovlisa atareben sunT-qviT varjiSebs, uniSnaven orTopediul saSua­lebebsa da samkurnalo curvas. gulisa da filt­vebis funqciis darRvevis dros naCvenebia opera­ciuli mkurnaloba (Cavardnili mkerdis amoweva).

**soliseburi (qaTmisebri) mkerdi**

mkerdis Zvlisa da masze mimagrebuli neknTa soliseburi deformacia

**eTiologia.** am SemTxvevaSi saubaria Tanda­yolil deformaciaze, ris ganviTarebaSi adre didi roli eniWeboda raqits.

**klinikuri suraTi:** gulmkerdis solisebr deformaciasTan erTad adgi-li aqvs kifozs; Civi­lebi gulisa da filtvebis mxriv ar aris.

**mkurnaloba** aris konservatiuli da moicavs sunTqviT varjiSebsa da samkurnalo curvas; Zili rekomendirebulia mucelze woliT; bavSvobaSi mni­Svnelovnad gamoxatuli deformaciis dros dama­tebiT SeiZleba pasiuri koreqciisaTvis specia­luri bandaJis gamoyeneba.

**xerxemlisa da kidurebis degeneraciuli daavadebebi**

xerxemlisa da kidurebis degeneraciuli daavadebebi warmoadgens ara-anTebadi xasiaTis pirvelad darRvevebs. sasaxsre xrtilebi kargaven dat-virTvis atanis unars nivTierebaTa cvlis procesebis darRvevis Sedegad, amasTan erTi da igive datvirTva calkeul SemTxvevebSi iwvevs degeneraci-uli cvlilebebis ganviTarebas, xolo sxva SemTxvevaSi araviTari ziani ar moaqvs.

xerxemlisa da kidurebis degeneraciuli daavadebebis gamomwvev faqto-rad ganixileba:

\_ xrtilis an saxsris Tandayolili displazia;

\_ xrtilis dazianeba, magaliTad anTebiTi procesebi, travmebi an to-qsikuri zemoqmedeba.

\_ sxeulis zedmeti wona, xangrZlivi mZime fizikuri datvirTva swrafi zrdis periodSi, sta­tikuri gadatvirTva, magaliTad arasworad Sexor­cebu-li motexilobis Semdeg;

xerxemlis degeraciuli daavadebebis dros ganixileba ara mxolod pirveladad dazianebuli xrtili, aramed mTeli moZravi segmenti, romelic moicavs malTaSua disks da zeda da qveda male­bis mfarav firfitebs. kom-pleqsSi erT-erTi rome­lime detalis funqciis amovardna iwvevs aras­wor dat­vir­Tvas da mTeli blokis reaqtiul cvlilebebs.

kiduris saxsris degeneraciul cvlilebebs (madeformirebuli arTro-zi) gaaCnia sxvadasxva sim­ptomi: msubuqi tkivili an umZimesi funqciona­luri darRvevebi dazianebuli saxsris ankilozis ganviTarebamdec ki.

daavadebis mimdinareobaSi ansxvaveben Semdeg stadiebs:

\_ xrtilis gadaZabva araswori datvirTvis Sedegad;

\_ kunTis gadaZabva araswori dartvi­rTvisas kompensaciis dros.

\_ xrtilisa da Zvlis destruqcia xangrZlivi araswori datvirTvisas.

\_ motexilobebi da amovardnilobebi saxsarSi.

erTi saxsris dazianebam aseve SeiZleba gamoiwvios cvlilebebi imave kiduris sxva saxsre­bSi da xerxemalSic ki.