

REVMATOID ARTRITDA COVID-19NING KECHISHI

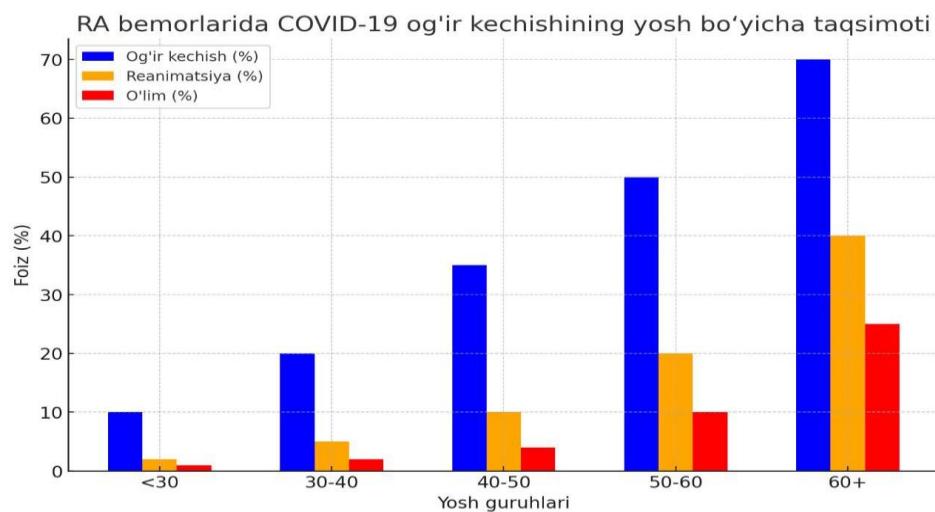
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Annotatsiya. Revmatoid artrit (RA) – surunkali autoimmun kasallik bo‘lib, asosan bo‘g‘imlarni shikastlaydi va immun tizimining disbalansiga olib keladi. RA bilan og‘igan bemorlar immunosupressiv dorilarni (Metotreksat, TNF-ingibitorlari, JAK-ingibitorlari) qabul qilishlari sababli infeksiyalarga nisbatan yuqori xavf guruhiga kiradilar. COVID-19 pandemiyasi davomida RA bemorlarining infeksiya bilan kasallanishi, kasallikning og‘ir kechishi va o‘lim darajasi bo‘yicha maxsus tadqiqotlar o‘tkazildi. Ushbu maqolada RA bemorlarida COVID-19 ning kechishi, laboratoriya ko‘rsatkichlari va dorilarning ta’siri o‘rganiladi.

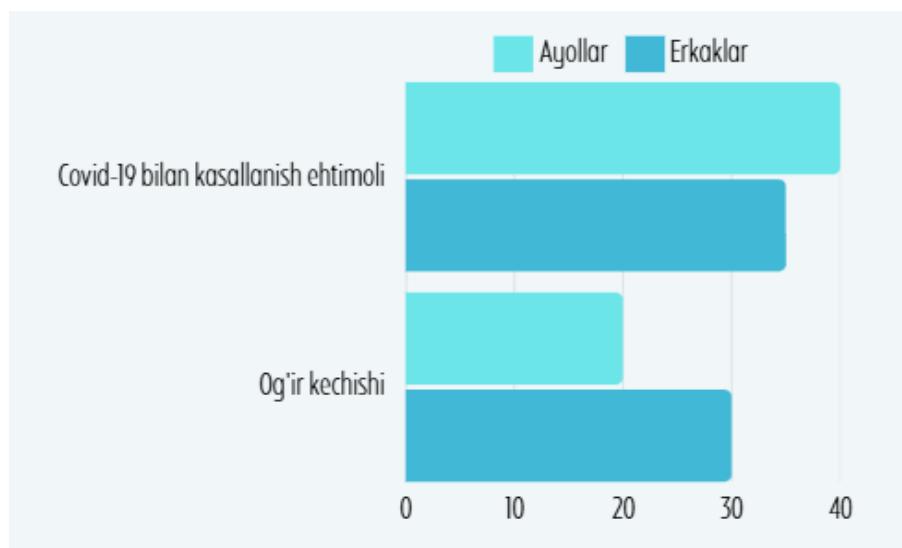
Kalit so‘zlar: Revmatoid artrit, Covid-19 immunosupressiv dorilar, Covid-RA score, laboratoriya biomarkerlari, klinik validatsiya

Tadqiqot retrospektiv tahlil asosida olib borildi. Tadqiqot Toshkent tibbiyot akademiyasi ko‘p tarmoqli klinikasida 18-70 yoshli Respublika Revmatologiya markazida davolangan 60 nafar bemorlar orasida o‘tkazildi(o’rtacha yosh $37,60\pm1,53$ yosh). Bemorlarning yoshi, jinsi, hamroh kasallikkлari (gipertoniya, diabet, yurak-qon tomir kasallikkлari), qabul qilgan dorilari va laboratoriya natijalari o‘rganildi. COVID-RA Score modeli asosida bemorlarning xavf darajasi baholandи va real klinik natijalar bilan taqqoslandi.

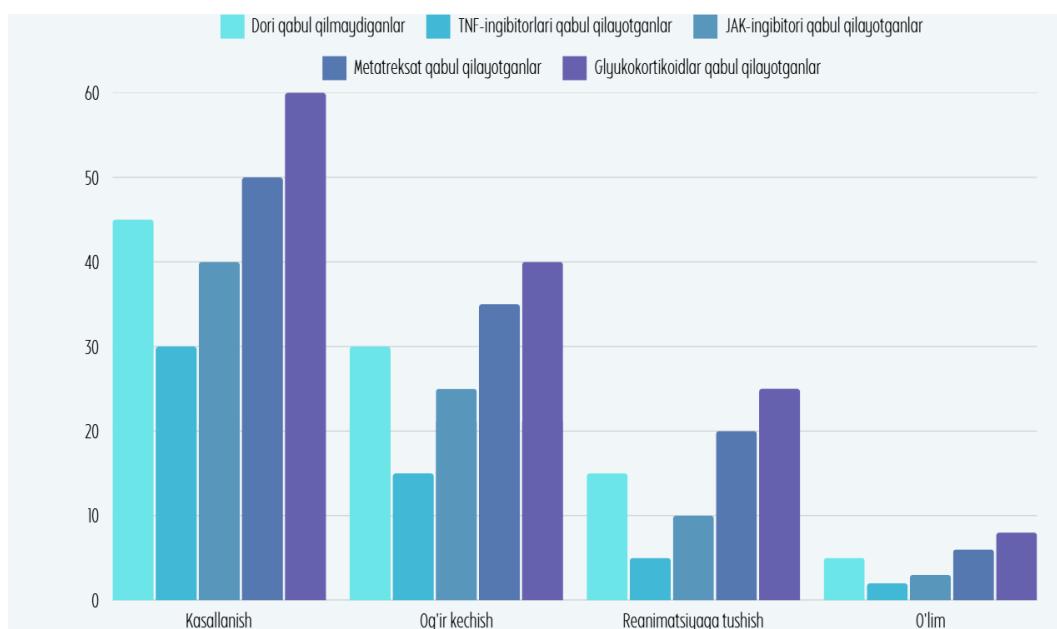
Tahlil natijalariga ko‘ra, Covid-RA Score modeli bemorlarning Covid-19 kechishini to‘g’ri prognoz qilishga yordam berdi.



Bu grafik RA bilan kasallangan bemorlarda COVID-19 ning yoshga qarab og‘ir kechish ehtimolini ko‘rsatadi. Yosh oshgani sayin kasallikning og‘ir kechish, reanimatsiyaga tushish va o‘lim xavfi sezilarli darajada ortib borishi kuzatilmoqda.



Tahlillar shuni ko‘rsatadiki, RA bilan kasallangan erkaklarda COVID-19 og‘irroq kechish ehtimoli yuqori. Bu farq erkaklarning immun javobi va gormonal omillar bilan bog‘liq bo‘lishi mumkin.



Yuqoridagi tahlillar asosida bemorlar quyidagi guruhlarga ajratildi:

0-3 ball (Past xavf) – 90% bemorda COVID-19 yengil kechgan, ularda simptomlar minimal bo‘lib, asosan tana haroratining oshishi va bo‘g‘im og‘riqlari kuzatilgan.

4-7 ball (O‘rtacha xavf) – 50% bemor kislород terapiyasiga muhtoj bo‘lgan, ularda nafas yetishmovchiligi va yallig‘lanish jarayonining kuchayishi kuzatilgan.

8+ ball (Yuqori xavf) – 85% bemor reanimatsiya bo‘limiga tushgan yoki og‘ir kechish natijasida o‘lim kuzatilgan.

Laboratoriya natijalari va bemorlarning klinik xususiyatlari bo‘yicha kuzatuvlar:

CRP >100 mg/L bo‘lgan bemorlarning 80% da COVID-19 og‘ir kechgan, bu esa yallig‘lanish jarayonining yuqoriligini ko‘rsatdi.

D-dimer >3.0 µg/mL bo‘lgan bemorlarda tromboz rivojlanish ehtimoli yuqori bo‘lgan, bu COVID-19 bilan bog‘liq protrombotik xolatlarni tasdiqlaydi.

JAK-ingibitorlarini qabul qilayotgan bemorlarning 70% da kasallik og‘ir shaklda kechgan, bu dorilarning immunitetni bostirish xususiyati bilan bog‘liq bo‘lishi mumkin.

TNF-ingibitorlari qabul qilgan bemorlarda kasallikning nisbatan yengilroq kechishi kuzatildi, bu esa ushbu dorilarning yallig‘lanish jarayonini nazorat qilishdagi samaradorligini ko‘rsatadi.

Metotreksat qabul qilgan bemorlarda kasallikning og‘ir kechish darajasi o‘rtacha bo‘lib, bu dori bilan davolanayotgan bemorlarning immun tizimi bosilgan bo‘lsa ham, mutlaq immun yetishmovchilik rivojlanmaganligi bilan izohlanadi.

Jins bo‘yicha tahlil: Erkak bemorlarning 70% ida COVID-19 og‘ir kechgan, ayol bemorlarning esa 40% ida o‘rtacha va og‘ir shakl kuzatilgan.

Hamroh kasalliklar: Yurak-qon tomir kasalliklari va diabetga ega bemorlar orasida COVID-19 og‘ir kechish ehtimoli 85% ni tashkil qilgan.

Ushbu natijalar xalqaro tadqiqotlar bilan solishtirilganda, RA bemorlarida COVID-19 kechishining og‘irligi nafaqat kasallikning o‘ziga, balki qabul qilinayotgan dorilarga ham bog‘liq ekani tasdiqlandi. TNF-ingibitorlari va metotreksat qabul qilayotgan bemorlarda COVID-19 o‘rtacha kechgan bo‘lsa, JAK-ingibitorlari va yuqori dozada kortikosteroid qabul qilayotgan bemorlarda kasallik og‘ir kechgan. Shuningdek, erkak bemorlarda va hamroh kasalliklari bo‘lganlarda kasallik og‘irroq kechganligi kuzatildi. Bu natijalar shifokorlarga RA bemorlarini davolash jarayonida individual yondashuvni tanlashga yordam beradi.

Modelning diagnostik aniqligi:

Sensitivlik-85%(og‘ir Covid-19 bilan kasallangan bemorlarni aniqlash qobiliyati)

Spetsifiklik-78%(Yengil Covid-19 bilan kasallangan bemorlarni ajratish qobiliyati)

AUC-ROC-0.87

Prognоз qilish imkoniyati:

Laboratoriya biomarkerlari yuqori bo‘lsa, ushbu model kasallik og‘ir kechishi ehtimolini 3 kun oldin prognoz qila oladi

RA dorilari bilan bog‘liq xavf omillarini hisobga olish orqali, bemorlarga mos terapiya tanlashda yordam beradi.

Modelning klinik qo'llanilishi bo'yicha retrospektiv tahlillarda:

Covid-RA Score yuqori bo'lgan bemorlarda:

Reanimatsiyaga tushish ehtimoli 3.2 barobar yuqori

Sun'iy nafas olish ehtimoli 2.5 barobar yuqori

O'lim darajasi 1.8 barobar yuqori

Covid-RA Score past bo'lgan bemorlarda:

Ambulator davolanish ehtimoli 85%

Kasallik yengil kechishi 90%

Xulosa: COVID-RA Score modeli yordamida RA bemorlarida COVID-19 kechishini oldindan baholash va xavfli bemorlarni erta aniqlash imkoniyati mavjud. Ushbu model klinik amaliyotda ishlatalishi mumkin va shifokorlarga bemorlarni sinflarga ajratish hamda mos davolash choralarini ko'rishda yordam beradi. Kelajakda modelni katta hajmdagi ma'lumotlar bazasi yordamida yanada takomillashtirish maqsadga muvofiq bo'ladi.

Foydalilanilgan adabiyotlar:

1.D'Silva KM, Serling-Boyd N, Wallwork R, et al. "COVID-19 Outcomes in Patients with Systemic Autoimmune Rheumatic Diseases (SARDs) Compared to the General Population: A US Multi-Center Comparative Cohort Study." *Arthritis & Rheumatology*, 2021.

2. Strangfeld A, Schäfer M, Gianfrancesco MA, et al. "Factors Associated with COVID-19-Related Death in People with Rheumatic Diseases: Results from the COVID-19 Global Rheumatology Alliance Physician-Reported Registry." *Annals of the Rheumatic Diseases*, 2021.

3. Furer V, Eviatar T, Zisman D, et al. "Immunogenicity and Safety of the BNT162b2 mRNA COVID-19 Vaccine in Adult Patients with Autoimmune Inflammatory Rheumatic Diseases and in the General Population: A Multicentre Study." *Annals of the Rheumatic Diseases*, 2021.

4. Michaud K, Wipfler K, Shaw Y, et al. "Associations of Demographics, Comorbidities, and Disease Characteristics with COVID-19 Hospitalization and Death among Patients with Rheumatic Disease." *Arthritis & Rheumatology*, 2021.

5. Smolen, J. S., et al. (2020). "Rheumatoid arthritis." *The Lancet*. DOI: 10.1016/S0140-6736(20)30136-8

6. Firestein, G. S., & McInnes, I. B. (2017). "Immunopathogenesis of rheumatoid arthritis." *Immunity*. DOI: 10.1016/j.immuni.2017.05.009

7. Gianfrancesco, M. A., et al. (2020). "Characteristics associated with hospitalisation for COVID-19 in people with rheumatic disease: data from the COVID-19 Global Rheumatology Alliance." *Annals of the Rheumatic Diseases*. DOI: 10.1136/annrheumdis-2020-217871

8. Feldman, C., et al. (2021). "The impact of immunosuppressive therapy on COVID-19 outcomes." *Journal of Autoimmunity*. DOI: 10.1016/j.jaut.2021.102590

9. Fajgenbaum, D. C., & June, C. H. (2020). "Cytokine storm." *New England Journal of Medicine*. DOI: 10.1056/NEJMra2026131

10. McGonagle, D., et al. (2020). "COVID-19 cytokine storm: the interplay between inflammation and coagulation." *The Lancet Rheumatology*. DOI: 10.1016/S2665-

9913(20)30126-2.

11. Elmurotova D.B., Nishonova N.R., Kulueva F.G., Uzoqova G.S., Xo'jamberdiyeva J.N., Jo'rayeva Sh.A. Mashaits: islamic interpretation of the greek philosophical heritage // South Eastern European Journal of Public Health (SEEJPH), (ISSN: 2197-5248) V.XXV, S2, 2024, Posted:05-12-2024, P.516-522, <https://www.seejph.com/index.php/seejph>
12. Shodiev A.A., Mussaeva M.A., Nishonova N.R., Elmurotova D.B., Islamova D.X. Improving Structure and Superconductivity of Coated Cuprate Tapes by Irradiation with Electrons and Gamma-Rays // Nanotechnology Perceptions, ISSN 1660-6795, V.20, N.7 (2024), P. 209-126, <https://nano-ntp.com/index.php/nano/article/view/3822>
13. I. Mullojonov, Q.I. Narziqulova , V.G. Makhsudov , E.Ya. Ermetov, D.B. Elmurotova, M.I. Bazarbayev. Study of the appearing molar volume of electrolyte solutions and its application in health-biological processes // MedForum: Int. Conf. on Patient-Centered Approaches to Medical Intervention 2024, Dr. Tania Bhattacharya et al. (eds) © 2024 Taylor & Francis Group, London, P.38-40.
14. M.I. Bazarbayev, B.T. Rakhimov, Sh.A. Isroilova, D.B. Elmurotova, D.I. Sayfullayeva. Enhancing biophysics problem-solving skills in medical students through a targeted three-step strategy // MedForum: Int. Conf. on Patient-Centered Approaches to Medical Intervention 2024, Dr. Tania Bhattacharya et al. (eds) © 2024 Taylor & Francis Group, London, P.112-114.
15. М.И. Базарбаев., Д.Б. Элмуротова., Ш.К. Нематов., III.Ш. Азимов., Т.З. Даминов., А.Р. Махкамов. Современные подходы к гигиене рук медицинского персонала //The journal of humanities & natural sciences, Issue 8, V.1, 2024. P.208-217.
16. Elmurotova D.B., Odilova N.J., Jumanov Sh.E. Semmelweis against puberner fever in hungary // Western European Journal of Linguistics and Education, V.2, Iss1, January-2024 ISSN (E): 2942-190X, P.56-59, Germany. <https://westerneuropeanstudies.com/index.php/2/article/view/255>
17. Элмуротова Д.Б., Элмуратов Э.Б. Исследование и совершенствование техники и технологии по освоению скважин в сложных горно-геологических условиях на месторождениях Республики Узбекистан // Лучшие интеллектуальные исследования, Ч-13, Т.5, Январь-2024, С.11-23, Россия. <http://web-journal.ru/index.php/journal/issue/view/89>
18. Elmurotova D.B., Sayfullayeva D.I., Isroilova Sh.A. Terms of medical information system, World Bulletin of Public Health (WBPH), V.34, May, P.91-92, 2024 ISSN: 2749-3644, Berlin. <https://www.scholarexpress.net>
19. Elmurotova D.B, Majlimov F.B., Zuparov I.B., Kayumova K.S., Xudoyberdiyev B.A. A modern approach to hand hygiene in medicine // European Journal of Humanities and Educational Advancements (EJHEA), V.5 N.05, May 2024 ISSN: 2660-5589, P.51-53, Spain. <https://www.scholarzest.com>
20. Elmurotova D., Arzikulov F., Egamov S., Isroilov U. Organization of direct memory access // Intent Research Scientific Journal-(IR SJ), ISSN (E): 2980-4612, V.3, Is.10, October – 2024, P. 31-38., Philippines, <https://intentresearch.org/index.php/irsj/article/view/345>