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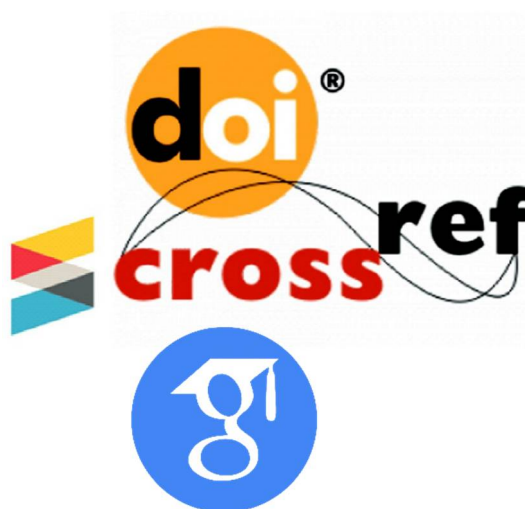
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ANNOTATION

The high incidence (1-2%) of the population of chronic heart failure (CHF), an increase in the average age of newly diagnosed patients, a progressive course, the need for inpatient treatment, and an unfavorable prognosis determine the relevance and need for further study of this pathological syndrome. This article discusses new successful directions of pharmacological and non-drug correction of cardiac dysfunction in the treatment of patients with CHF, many changes that can be described as evolutionary in the problem of heart failure, ways to improve the quality of life, and life expectancy of patients with CHF.

Key words: chronic heart failure, pathogenetic treatment

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SURUNKALI YURAK YETISHMOVCHILIGINI DAVOLASHNING ISTIQBOLLI YO'NALISHLARI

ANNOTATSIYA

Surunkali yurak yetishmovchiligi (SYuYe) bilan aholi orasida kasallanishning yuqori darajadallari (1-2%), ilk bor tashxis qo'yilgan bemorlarning o'rtacha yoshining oshishi, progressiv kechishi, kasalxonada davolash zarurati va salbiy prognoz ushbu patologik sindromning dolzarbligini va uni yana o'rganish zarurligini belgilaydi Ushbu maqolada SyYuYe bilan og'rigan bemorlarni davolashda yurak disfunktsiyasining farmakologik va nofarmakologik korrektsiyalashning yangi yutuqli yo'nalishlari, yurak etishmovchiligi muammosida evolyutsiya sifatida tavsiflanishi mumkin ko'plab o'zgarishlar, SYuYe bilan og'rigan bemorlarning hayot sifati va umr ko'rish davomiyligini yaxshilashga qaratilgan zamonaviy usullarini muxokama qilinadi.

Kalit so'zlar: surunkali yurak yetishmovchiligi, patogenetik davolash

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ПЕРСПЕКТИВНЫЕ НАПРАВЛЕНИЯ ЛЕЧЕНИЯ ХРОНИЧЕСКОЙ СЕРДЕЧНОЙ НЕДОСТАТОЧНОСТИ

АННОТАЦИЯ

Высокая заболеваемость (1-2%) населения хронической сердечной недостаточностью (ХСН), увеличение среднего возраста впервые выявленных больных, прогрессирующее течение, потребность в стационарном лечении, неблагоприятный прогноз определяют актуальность и необходимость дальнейшего изучения этого патологического синдрома. В данной статье обсуждаются , новые успешные направления фармакологической и немедикаментозной коррекции дисфункции сердца в лечении больных с ХСН, многие изменения, которые можно охарактеризовать как эволюционные в проблеме сердечной недостаточности, пути улучшения качества жизни и продолжительности жизни больных с ХСН.

Ключевые слова: хроническая сердечная недостаточность, патогенетическое лечение

Yurak-qon tomir tizimining ko'plab kasalliklari orasida surunkali yurak etishmovchiligi (SYuYe) alohida o'rin tutadi. Aholi orasida kasallanishning yuqori darajadallari (1-2%), ilk bor tashxis qo'yilgan SYuYe bilan og'rigan bemorlarning o'rtacha yoshining oshishi, progressiv kechishi, kasalxonada davolash zarurati va salbiy prognoz ushbu patologik sindromning dolzarbligini va uni yana o'rganish zarurligini belgilaydi [3,4]. Bundan tashqari, SYuYe har to'rtinchi inson hayoti davomida rivojlanishi taxmin qilinmoqda [5]. Shu bilan birga, SYuYe tashxisi qo'yilgandan keyin 5 yil ichida faqat har ikkinchi bemor omon qoladi va yurak etishmovchiligi bo'lgan odamlarda o'lim xavfi har bir gospitalizatsiyadan keyin ortib boradi [6].

Ma'lumki, SYuYe rivojlanishiga hissa qo'shadigan sababchi yoki komorbid kasalliklar juda ko'p. C. Lawson va boshqalar fikriga ko'ra. [1], SYuYe rivojlanishiga yordam beradigan eng keng tarqalgan sababchi yoki komorbid kasalliklar: arterial gipertenziya (65%), yurak ishemik kasalligi - YuIK (50%), surunkali buyrak kasalligi (43%), bo'lmachalar fibrilatsiyasi (41%), infarktdan keyingi kardioskleroz - IKKS (27%), qandli diabet (27%) semizlik (3%), surunkali obstruktiv o'pka kasalligi (23%), anemiya (12%), insultdir (12%). Shu bilan birga, o'lim va gospitalizatsiya ehtimoli bilan kuchli bog'liqlikka ega bo'lgan, shuningdek, tegishli patologiyaga ta'sir qilganda SYuYe natijalarining o'zgarishi bo'yicha klinik tadqiqotlarning yuqori darajadagi dalillariga ega kasalliklar bu yurak ishemik kasalligi, aorta stenozi, qandli diabet va surunkali buyrak kasalligidir.

Shu munosabat bilan, bir tomondan, SYuYe bilan og'rigan bemorlarni davolashda hozirda mavjud kasallikni davolash yondashuvlarni takomillashtirishga, ikkinchi tomondan, yurak disfunktsiyasining farmakologik va nofarmakologik korrektsiyalashning yangi yutuqli yo'nalishlarini topishga qaratilgan fundamental va amaliy tadqiqotlarga katta ehtiyoj borligi ayon bo'ladi.

So'nggi 20 yil ichida surunkali yurak etishmovchiligi muammosida evolyutsiya sifatida tavsiflanishi mumkin bo'lgan ko'plab o'zgarishlar yuz berdi. 2021 yilda Evropa Kardiologlar Jamiyati (ESC) va Yurak etishmovchiligi assotsiatsiyasining yangilangan klinik ko'rsatmalari va 2022 yilda Amerika yurak assotsiatsiyasining tavsiyalari e'lon qilindi. Klinik ko'rsatmalarning hozirgi yangilanishi dalillarga asoslangan tibbiyot nuqtai nazaridan bir qator yangi ilmiy yutuqlarning to'planishi bilan bog'liq. Kiritilgan o'zgarishlardan eng muhimi etiologiya masalalari, SYuYening yangi ta'rifi, SYuYeni fenotiplarga muvofiq diagnostika qilish va davolash algoritmlari va bir qator dori vositalariga yangi ko'rsatmalardir.

SYuYe davolashga qaratilgan terapevtik yondashuvlar juda ko'p va umumiy muolajalarlar, farmakoterapiya, elektrofizyologik terapiya, jarrohlik aralashuvlar va qon aylanishini mexanik qo'llab-quvvatlashni o'z ichiga oladi. Tabiiyki, har bir aniq holatda bu usullar u yoki bu kombinatsiyada qo'llaniladi [8].

Etiotrop va patogenetik terapiya yordamida SYuYe bilan og'rigan bemorlarning hayot sifati va umr ko'rish davomiyligini yaxshilash mumkin. Davolashga individual yondashuv, birinchi navbatda, SYuYe bilan kasallangan bemorlar guruhining etiologik geterogenligini hisobga olish zarurligini taqozo etadi [9,10]. Yurak etishmovchiligining rivojlanishi bilan asoratlangan kasalliklar patogenezida har xil bo'lganligi sababli, universal terapiya algoritmlarini yaratish qiyinchilik tug'diradi [7,10]. Shunga qaramay, ko'p hollarda yurak etishmovchiligini keltirib chiqaradigan kasallikni davolashning to'g'ri tanlangan rejasi yurak dekompensatsiyasi namoyon bo'lishini sezilarli darajada kamaytirishi va ba'zida bemorga ulardan butunlay xalos bo'lishga imkonini berishi mumkin (masalan, yurak kasalliklarini muvaffaqiyatli jarrohlik yo'li bilan davolagandan keyin) [6, 11]. Gap, birinchi navbatda, ishemiya va o'tkir miokard infarktini davolash, takroriy yurak xurujlarining oldini olish, arterial gipertenziya, qandli diabet, semizlik va dislipidemiya bilan og'rigan bemorlarni aniqlash va faol davolash, shuningdek, miokardning spetsifik patologiyasi sabablarini bartaraf etish, yurak klapanlari patologiyasi korrektsiyasi haqida ketmoqda [6].

Prognozni yaxshilashga qaratilgan yurak etishmovchiligini davolashning barcha zamonaviy usullarini bir nechta asosiy guruhlarda umumlashtirish mumkin, ularning har biri o'ziga xos nishonga ega [12]:

- kardiomiotsitlar o'limini (nekroz va apoptoz) va hujayra organellalarini yo'qotish (autofagiya) bartaraf etish;
- yurakning lusitrop va inotrop funksiyalarini yaxshilash (yurak zarb hajmini oshirish, yurak faoliyatini qayta sinxronlashtirish va yurak qisqarishini modulyatsiya qilish);
- yurakning patologik remodellanishini darajasini pasaytirish (yurak kameralarning kengayishi va sferiklashishi, miyokard massasining ortishi);
- faol qisqaruvchi kardiomiotsitlar populyatsiyasini saqlash va ko'paytirish (kardiomiotsitlarning uyqu va gubernatsiya holatidan chiqishi yoki yangi kardiomiotsitlarning paydo bo'lishi).

SYuYe bilan og'rigan bemorlarda farmakoterapiyaning maqsadlari quyidagilardan iborat: o'lim ko'rsatkichini kamaytirish, SYuYe dekompensatsiyasi tufayli qayta gospitalizatsiyani oldini olish, klinik holatni, funksional imkoniyatlarni va hayot sifatini yaxshilash.

Hozirgi vaqtda yurak-qon tomir tizimining neyrohumoral zo'riqishini kamaytirish SYuYe bilan og'rigan bemorlarning uzoq umr ko'rishining eng katta o'sishini ta'minlashiga, shuningdek, angiotensin-o'zgartiruvchi ferment ingibitorlari (yoki angiotensin II retseptorlari antagonistlari), beta-blokatorlar va mineralokortikoid retseptorlari antagonistlarini [13] qo'llash maqsadga muvofiqligiga hech kim shubha qilmaydi. Biroq, bu guruhlar dori-darmonlari xatto birgalikda qo'llanilganda ham (uch karra neyrogormonal blokada) SYuYeni davolashda panatseya bo'lolmadi. Neyrogormonal modulyatorlarning ma'lum imkoniyatlari chegarasi (o'lim xavfini kamaytirish 23-35% dan oshmaydi) ushbu sindromda nafaqat sirkulyatsion, balki to'qima darajasida faollashgan

neuroendokrin tizimi funktsional holatiga medikamentoz ta'sir qilishning tubdan yangi nishonlarini izlashni talab qildi. [16].

Farmatsevtika substansiyalarini ishlab chiqishning afzal yo'nalishlarini izlashda diqqat markazi, alohida neuroendokrin reaksiyalarning o'zigagina zaif ta'sir qilishdan muvozanatli modulyatsiya bilan "foydali" gormonal tartibga solish yo'nalishi faoliyatini bir vaqtning o'zida rag'batlantirishga qaratildi [14]. Ushbu kontseptsyaning muvaffaqiyati klinik tadqiqotlarda tasdiqlandi, unda valsartan tarkibidagi sakubitril neprilizin inhibitori [15] SYuYe bilan og'riqan bemorlarning hayot sifatini va prognoz yaxshilash nuqtai nazaridan renin-angiotensin-aldosteron tizimining "sof" blokatori enalaprilidan ustunligini ta'minladi. [17, 37-40].

PARAGON-HF tadqiqotining sub-tahlil natijalari va PARAGON-HF va PARADIGM-HF tadqiqotlarining meta-tahlili, sakubitril/valsartanning kasallikni modifikatsiyalovchi faolligini va past chap qorincha qon otish fraksiyasi bilan SYuYe chegarasidan tashqaridagi yurak yetishmovchiligi tufayli kasalxonaga yotqizish sonini kamaytirishini ko'rsatadi. Bu esa chap qorincha kontraktil funktsiyasining ushbu ko'rsatkichining qiymatidan qat'i nazar, ushbu dorilar kombinatsiyasini qo'llash maqsadga muvofiqligini muhokama qilish imkonini beradi [17].

Normal yoki baland tizimli qon bosimi oshgan o'tkir dekompensatsiyalangan bemorlarda diuretiklarga refrakterlikni bartaraf etish uchun gormonal vazodilatatorlar qo'shilishi mumkin, ulardan eng istiqbollisi serelaksin (inson relaksin-2ning rekombinant analogi), nesiritidning past dozalari (inson rekombinant miya natriuretik peptidi) dan foydalanishdir. [18].

Va nihoyat, bir qator gormonlar va neurotransmitterlarning biologik ta'siri ularning ikkilamchichi vositachilariga ta'sir qilish orqali kerakli yo'nalishda modulyatsiya qilinishi mumkin. Masalan, eriydigan guanilatsiklaza retseptorlari stimulyatori vericiguatning sanogen ta'sirlari (vazodilatatsiya va koronar mikrovaskulyar disfunktsiya og'irligining pasayishi, fibroz va miyokard gipertrofiyasi rivojlanishining sekinlashishi, diastolda kardiomiotsitlarning bo'shashishi tezligi va to'liqligining oshishi, qorincha-arterial konyugatsiyaning yaxshilanishi, va yurak zahirasi ko'payishi) chap qorincha qon otish fraksiyasi past bo'lgan SYuYe bilan og'riqan bemorlarda uzoq muddatli foydalanilganda prognozni yaxshilaydi va dekompensatsiya tufayli kasalxonaga yotqizish zaruriyatini kamaytiradi [19].

SYuYeni davolashda yangi yo'nalishlarni izlashga kelsak, eng muvaffaqiyatli bo'lgan vektor natriy-glyukoza kotransportatorining 2-turi (INGT-2) ingibitorlari guruhidan gipoglikemik dorilarni qo'llashga qaratilgan. Gliflozinlar deb ataladigan dorilar samaradorligining ishonchli dalillari Evropa kardiologiya jamiyati mutaxassislariga yuqorida muhokama qilingan neurohormonal modulyatorlar bilan bir qatorda 2021 yilda ikkita selektiv INGT-2 (dapagliflozin va empagliflozin) SYuYe terapiyasining 4-komponenti ("sehrli to'rtlik") sifatida belgilashga imkon berdi [6]. Ularni II-IV funktsional sinf SYuYe va chap qorincha qon otish fraksiyasi past bo'lgan bemorlarda qo'llanilishi, uglevod almashinuvi buzilishining mavjudligi va og'irligidan qat'i nazar, yurak-qon tomir kasalliklaridan o'lim va dekompensatsiyalangan yurak etishmovchiligi tufayli hospitalizatsiya sonini kamaytirishni ta'minlaydi.

O'tgan asrning oxirigacha SYuYeni davolash uchun "klassik" dorilar bo'lgan yurak glikozidlari hozirgi vaqtda faqat prognozga ta'sir qilmaydigan yordamchi vositalar arsenalida o'z o'rnini saqlab qoldi, ammo ma'lum klinik holatlarda simptomlarni yaxshilaydi. Bular taxisistolik bo'lmacha fibrilatsiyasi bilan assotsirlangan manifest yurak yetishmovchiligi va angiotensinga aylantiruvchi ferment ingibitori (yoki sakubitril/valsartan), beta-blokator, mineralokortikoid retseptorlari antagonisti va boshqa dori vositalarilar bilan davolashga qaramay, yurak etishmovchiligi belgilari saqlanib qolgan sinus ritimli bemorlardir. [20].

Zamonaviy farmakoterapiya imkoniyatlari cheklangan, yurak etishmovchiligi va gemodinamik beqarorlik bilan bog'liq bo'lgan og'ir yurak etishmovchiligi bo'lgan bemorlar uchun tunnel oxiridagi yorug'lik sifatida miyotrop birikmalarning yangi sinfi selektiv yurak miyozin faollashtiruvchisi hisoblangan omecamtiva mecarbilda foydalanish bo'lishi mumkin. SYuYe dekompensatsiyasi yoki yurak-qon tomir o'limi epizodini birlamchi yakuniy nuqta sifatida hisobga olgan GALACTIC-HF randomizatsiyalangan klinik tadqiqot natijalarining post hoc tahlili omekamtiv mekarbilning

funktsional sinf III va IV va past shap qorincha qon otish fraktsiyasi (<30%) bilan og'ir yurak etishmovchiligi bo'lgan bemorlarning prognoziga ijobiy ta'sirini ko'rsatdi. [21].

Xulosa. Ikkilamchi profilaktika sohasidagi misli ko'rilmagan yutuqlar SYuYe bilan og'rigan bemorlarda prognozni sezilarli darajada yaxshiladi, ammo, afsuski, xozitgacha yurak etishmovchiligi yuqori o'lim ko'rsatkichi bilan bog'liq bo'lib qolmoqda. Ushbu muammoni hal qilishda doimiy muvaffaqiyat bir vaqtning o'zida klinik amaliyotda randomizatsiyalangan tadqiqotlarda samaradorligini isbotlagan yurak etishmovchiligini davolashning doimiy takomillashtirilgan usullarini barcha tegishli imkoniyatlaridan to'liq foydalanishda namoyon bo'ladi.

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