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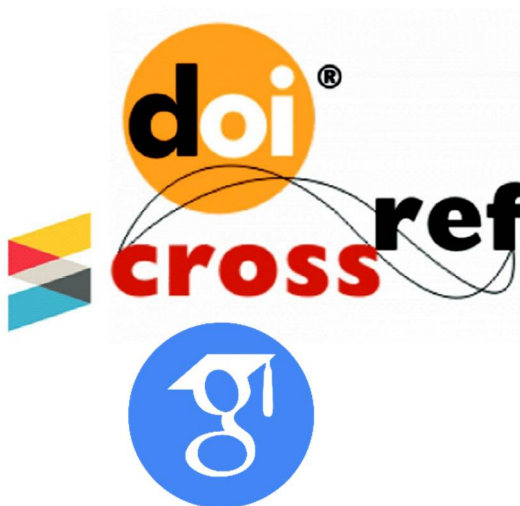
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БИОМЕДИЦИНА ВА АМАЛИЁТ ЖУРНАЛИ

ЖУРНАЛ БИОМЕДИЦИНЫ И ПРАКТИКИ | JOURNAL OF BIOMEDICINE AND PRACTICE

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CORRECTION OF MORPHOLOGICAL CHANGES IN THE ADRENAL GLANDS UNDER THE INFLUENCE OF CARBON MONOXIDE USING THE PLANT ASPARAGUS OFFICINALIS

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ABSTRACT

This article is based on the results of an experimental scientific study conducted on 120 six-month-old outbred white rats. During the study, morphological changes in the adrenal glands were identified in rats exposed to carbon monoxide. Following chronic exposure to carbon monoxide, the structural alterations in adrenal gland tissue were subjected to correction using the plant *Asparagus officinalis*. The obtained results have practical significance and may contribute to solving and preventing current endocrine-related problems, which represent one of the urgent directions of modern medicine.

Keywords: carbon monoxide, adrenal gland, morphology, experimental study, *Asparagus officinalis*, rats.

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Urganch davlat tibbiyot instituti

IS GAZINING TA'SIRIDA BUYRAK USTI BEZINING MORFOLOGIK O'ZGARISHLARINI QUSHQO'NMAS O'SIMLIGI YORDAMIDA KORREKSIYASI

ANNOTATSIYA

Ushbu maqolada eksperimental ilimiy tadqiqot tajriba natijalariga asoslangan bo'lib, tadqiqot 6 oylik 120 ta oq zotsiz kalamushlarda olib borilgan. Ilmiy ish davomida is gazidan zaharlangan 6 oylik oq zotsiz kalamushlarda buyrak usti bezining morfologik o'zgarishlari aniqlangan. Eksperimental is gazining surunkali tasiridan keyingi buyrak usti bezi to'qimasida yuzaga keladigan o'zgarishlarni morfologik o'zgarishlar qushqo'nmas o'simligi yordamida korreksiya qilingan bo'lib, natijalar amaliy tibbiyotga qo'llash bugungi kunning dolzarb yo'nalishlaridan biri bo'lgan endokrinologik muammolar yechimini topishga va oldini olishga xizmat qiladi.

Kalit so'zlar: Is gazi, buyrak usti bezi, morfologiya, eksperimental, qushqo'nmas, kalamush.

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КОРРЕКЦИЯ МОРФОЛОГИЧЕСКИХ ИЗМЕНЕНИЙ НАДПОЧЕЧНИКОВ ПРИ ВОЗДЕЙСТВИИ УГАРНОГО ГАЗА С ИСПОЛЬЗОВАНИЕМ РАСТЕНИЯ СПАРЖА

АННОТАЦИЯ

В данной статье представлены результаты экспериментального научного исследования, проведённого на 120 шестимесечных белых беспородных крысах. В ходе исследования были выявлены морфологические изменения надпочечников у крыс, подвергшихся воздействию угарного газа. После хронического воздействия угарного газа изменения в ткани надпочечников были подвергнуты коррекции с использованием растения кушконмас (спаржа). Полученные результаты имеют практическое значение и могут быть использованы в медицине для решения и профилактики актуальных эндокринологических проблем.

Ключевые слова: угарный газ, надпочечники, морфология, эксперимент, кушконмас (спаржа), крысы.

Dolzarbligi

Jahon sog'liqni saqlash tashkilotining bergan malumotiga asosan hozirgi kunda insonlar o'limining 6-8% qismi turli hil gazlardan zaharlanish oqibatida sodir bo'ladi. Is gazi bilan zaharlanish ko'plab rivojlangan mamlakatlarda o'tkir kimyoviy zaharlanishdan o'limning asosiy sabablaridan biridir. Is gazi bilan zaharlanish morfofunktsional holatni tartibga solishning ontogenetik jihatdan aniqlangan mexanizmlarini buzadi, bu esa buyrak usti bezi lateral dimorfizmining yo'qolishiga olib keladi [1]. Bunday o'zgarishlar tanatogenetik ahamiyatga ega bo'lishi mumkin, deb taxmin qilinadi. Shu bilan birga, buyrak usti bezining turli qismlarida morfofunktsional o'zgarishlarning ahamiyati va bu o'zgarishlarning patologik jarayonlarning rivojlanishiga hissasi etarli darajada o'rganilmagan. Buyrak usti bezi kasalliklaridan o'lim sonining ortishi o'z navbatida turli ekzogen omillarning, jumladan is gazining buyrak usti bezi to'qimasiga toksik ta'siri bilan ham bog'liqligi bu borada ilmiy izlanishlar zaruriyatini taqozo etadi [8].

Is gazidan surunkali zaharlanishda yurak-qon tomir tizimi: taxikardiya, aritmiya, ekstrasistol, arterial gipotenziyaga moyillik. Ishtahaning yo'qolishi, ko'ngil aynishi, ko'ngil aynishi, qusish, diareya, gastrit, kolit, mumkin bo'lgan jigar disfunktsiyasi [2]. Ko'rish o'tkirligining pasayishi, ayniqsa qorong'uda, binokulyar ko'rish va akkomodatsiyaning buzilishi, ranglarni idrok etish, ko'rish maydonlarining torayishi, turli intensivlikdagi to'r pardaning tomir patologiyasi shaklida fundusning o'zgarishi [6,7]. Eshitish va hid bilishning yomonlashishi. Qalqonsimon bezlarning disfunktsiyasi (gipertiroidizm), buyrak usti bezi funktsiyasining pasayishi kuzatiladi.

Markaziy Osiyo mamlakatlari xalq tabobatida qushqo'nmas barglari qon quyuqlashtiruvchi, qon to'xtatuvchi va siydik haydovchi vosita sifatida ishlatiladi. Rus xalq tabobatida qushqo'nmas o'tining qaynatmasi bronxial astma, kardionevroz, bachadon o'smalari va qoqshol uchun saratonga qarshi vosita sifatida ishlatiladi. Uning sharbati tashqaridan lishay va qo'tir uchun ishlatiladi. Klinik tadqiqotlar shuni ko'rsatdiki, qushqo'nmas barglari kichik dozalarda asab tizimini rag'batlantiradi, qon bosimini oshiradi, diurezni oshiradi va bakteritsid ta'sirga ega. O'simlik ekstraktlari aniq antioksidant xususiyatlarga ega. Qushqo'nmasning yallig'lanishga qarshi va antipiretik xususiyatlari aniqlangan [3,4,5].

Tadqiqotning maqsadi: is gazining surunkali tasiri natijasida buyrak usti bezining morfoloqik o'zgarishlarida qushqo'nmas o'simligi yordamida korreksiya natijalarini o'rganishdan iborat

Materiallar va usullar: Tajribaviy ilmiy tadqiqot ishi Abu Ali ibn Sino nomidagi Buxoro davlat tibbiyot institutining ilmiy-tadqiqot laboratoriyasida 2025–2027 yillar davomida olib borildi.

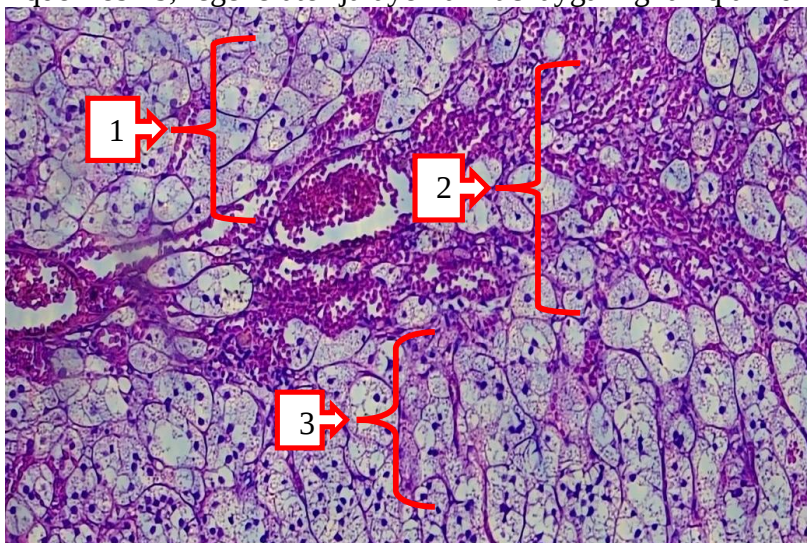
Tadqiqotlar belgilangan reja asosida tajribalarni o'tkazish va ishonchli natijalarga erishish uchun zarur bo'lgan barcha bosqichlar va ish jarayonlari qamrab olindi. Eksperimentni o'tkazish jarayonida etik me'yorlarga rioya qilinib, tadqiqotlarni puxta rejalashtirishga alohida e'tibor qaratildi. Tadqiqot ob'ekti va predmetini aniqlash, hamda statistik ishonchlilikni ta'minlash uchun yetarli hajmdagi kuzatuvlarni o'tkazish muhim deb topildi. Shu sababli tadqiqot dizayni mazkur talablarni hisobga olgan holda ishlab chiqildi. Tadqiqot bosqichlari empirik tibbiyot tamoyillari asosida belgilandi va bunda tadqiqot namunasi hajmi, ob'ekti hamda mavzusi tanlab olindi. Dastlabki bosqichda laboratoriya hayvonlari ko'paytirildi va keyingi tajribalar uchun tasodifiy tarzda eksperimental hamda nazorat guruhlariga ajratildi. Guruhlarning vakilligi ta'minlandi, shuningdek

hayvonlarni oziqlantirish sinovlari va tajribalarga tayyorgarlik ishlari bajarildi. Tajribalar vivariy sharoitida tug'ilgan 120 ta oq har ikki jinsdagi zotsiz kalamushlarda o'tkazildi. Unda 6 oylik kalamushlar jalb qilindi. Tajribalarda hayvonlardan foydalanish bo'yicha etika qoidalariga, Xelsinki kon'gressi talablariga rioya qilindi. Tajribalar boshlanishidan oldin barcha jinsiy yetuk kalamushlar bir hafta davomida karantinda bo'ldi va somatik yoki yuqumli kasalliklarni hisobga olmagandan so'ng ular odatiy bir xil sharoitdagi vivariy rejimiga o'tkazildi. Tajriba davomida me'yoriy va tajriba guruxlaridagi hayvonlarning xatti-harakatlari va fiziologik holati nazorati qilib borildi. Kalamushlar 3 ta guruhga bo'lindi ($n = 120$): I-nazorat guruhidagi ($n = 40$); II-guruh ($n = 40$); III-guruh ($n = 40$). Tajriba hayvonlari is gazining havodagi ulushi 0,01-0,05 mg/l dozasi bilan surunkali zaxarlantirildi. Tajriba davomida surunkali is gazidan zaxarlanish oqibatida 2 ta 6 oylik kalamush vafot etdi. 3-guruh ($n = 40$) tajribada surunkali is gazi bilan zaxarlangan kalamushlarga intragastral ravishda oshqozon metal zondi orqali 14 kun davomida 0,1 ml hajmdagi qushqo'nmas o'simligi yog'ini spirtidagi eritmasi (1:9 nisbatda) kiritib turildi;

Jami bo'lib eksperimentda 120 ta kalamushdan foydalanilgan bo'lib, ulardan faqat 6 tasi tajribalar davomida nobut bo'ldi.

Zotsiz oq kalamushlarda is gazidan surunkali zaxarlanishni modellashtirish va simulyatsiya qilish uchun kalamushlar 6 oylikdan boshlab maxsus jixozlangan germetik metal qutilarda 0,01-0,05 mg/l dozada 2 oy davomida is gazi kiritib turildi. Nazorat guruhining kalamushlariga intragastral ravishda metal oshqozon zondi orqali 1 ml hajmdagi distillangan suv 14 kun davomida kiritilib turildi. Eksperiment jarayonida kalamushlarning tana vaznining dinamikasi, ularning umumiy holati va xulq-atvori bo'yicha kuzatuvlar o'tkazildi. Hayvonlarning umumiy ahvoli va xulq-atvorida hech qanday og'ish bo'lmaganligi ko'rindi. Shundan so'ng tajriba hayvonlari ertalab tegishli vaqtda taroziga tortildi, och qoringa efir yordamida behushlik ostida boshini kesish orqali so'yildi va tajribaga olindi. Hayvonlar o'ldirish laboratoriya hayvonlaridan foydalangan holda tibbiy-biologik tadqiqotlari bo'yicha xalqaro tavsiyalarga muvofiq amalga oshirildi. Tadqiqot usullari gistomorfometrik, gistokimviy, mikroskopik, immunogistokimyoviy va statistik usullarni o'z ichiga olgan.

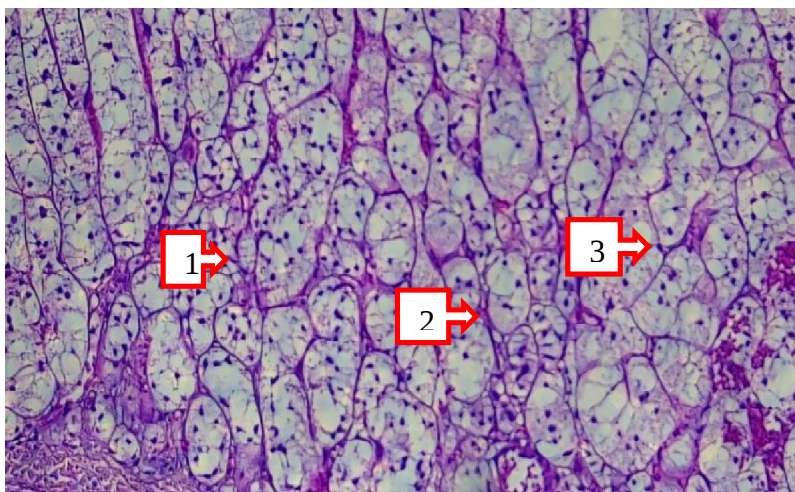
Natijalar: Tajribaviy sharoitidagi 6 oylik oq zotsiz kalamushlar surunkali is gazidan zaharlanishdan keyin sut qushqo'nmas o'simligi yordamida korreksiya qilindi va buyrak usti bezlaridagi morfologik va morfometrik o'zgarishlari o'rganilganda; buyrak usti bezini o'rab turgan yog' qavatida yog' kiritmalari kamayganligi va biriktiruvchi-kollagen tolalar siyraklashganligi, fibriblastlar kamayganligini ko'rishimiz mumkin. Bezning og'irligi bir tomonda $0,76 \pm 0,05$ gr dan $0,98 \pm 0,14$ gr gacha bo'lib, o'rtacha $0,85 \pm 0,19$ gr tashkil etdi. Bez kapsulasining qalinligi o'rtacha $1,65 \pm 0,24$ mkm gacha ingichkalashib, shish yo'qolganligi, qon tomirlar devori ingichkalashib, qonning sifati va miqdori oshib, regeneratsiya jarayonlar kuchayganligi aniqlanildi (1-rasm).



1-rasm. Tajribaviy sharoitidagi korreksiyadan keyingi 6 oylik oq zotsiz kalamushlarning buyrak usti bezlari po'sloq qavatidagi morfologik ko'rinishi. Gem-eozin bo'yog'i. Ob 20x 4ok. 1. Koptopchali soha hujayralari yiriklashgan va ko'paygan. 2. Yosh qon-tomirlar ya'ni

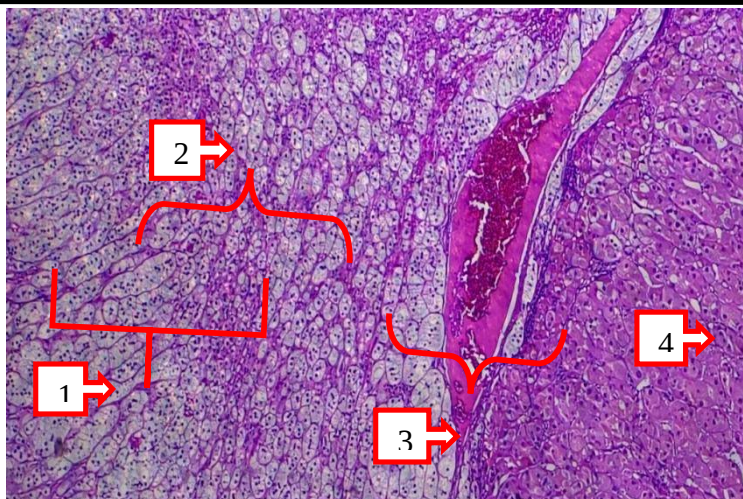
angiogenez jarayoni natijasida mayda tomirlar ko'paygan. 3.Tutamli sohadagi hujayralar ham yiriklashib, kengaygan.

Kapsula ostida po'stloq moddasi och sarg'imtir rangga kirganligi aniqlanildi. Mayda qon tomirlar rivojlangan ya'ni angiogenez jarayoni tezlashib, po'stloq qavatining qalinligi ham $16,85 \pm 0,05$ mkm dan $18,2 \pm 0,52$ mkm gacha ortgan bo'lib, o'rtacha $17,1 \pm 0,24$ mkmni tashkil etadi. Kapsula ostida po'stloq qavatining kam takomillashgan, kambial hujayralari ko'payganligi 2 yoki qatorni tashkil etganligi aniqlaniladi. Bunga parallel ravishda koptokchali sohasiga hujayralari ham, son jihatdan ko'payganligi bilan bir qatorda, koptokchali soha hujayralari kengaygan, sitoplazmasi yaxshi rivojlangan va yog'li kiritmalari ko'payganligi, yumaloq yadroga esa markazga kelganligini ko'rishimiz mumkin. Koptokchali sohaning qalinligi oshib, $3,88 \pm 0,23$ mkm dan $6,57 \pm 0,25$ mkm gacha bo'lib, o'rtacha $4,67 \pm 0,81$ mkmni tashkil etdi. Koptokchali soha ostida tutamli soha hujayralar ham ko'payganligi aniqlanildi. Tutamli sohaning qalinligi $6,58 \pm 0,14$ mkm dan $10,81 \pm 0,42$ mkm gacha bo'lib, o'rtacha $8,74 \pm 0,36$ mkmni tashkil etdi. Tutamli soha ostida joylahgan to'rsimon sohasi ham ingichkalashganligi aniqlanildi. To'rsimon sohaning qalinligi ham oshgan $3,54 \pm 0,32$ mkm dan $5,02 \pm 0,20$ mkm gacha bo'lib, o'rtacha $3,86 \pm 0,43$ mkmni tashkil etdi. Yosh hujayralari ko'qroq bo'lib, sitoplazmada kamroq lipid saqlagan, yadrolari hujayra markazida joylashganligi aniqlanildi (2-rasm).

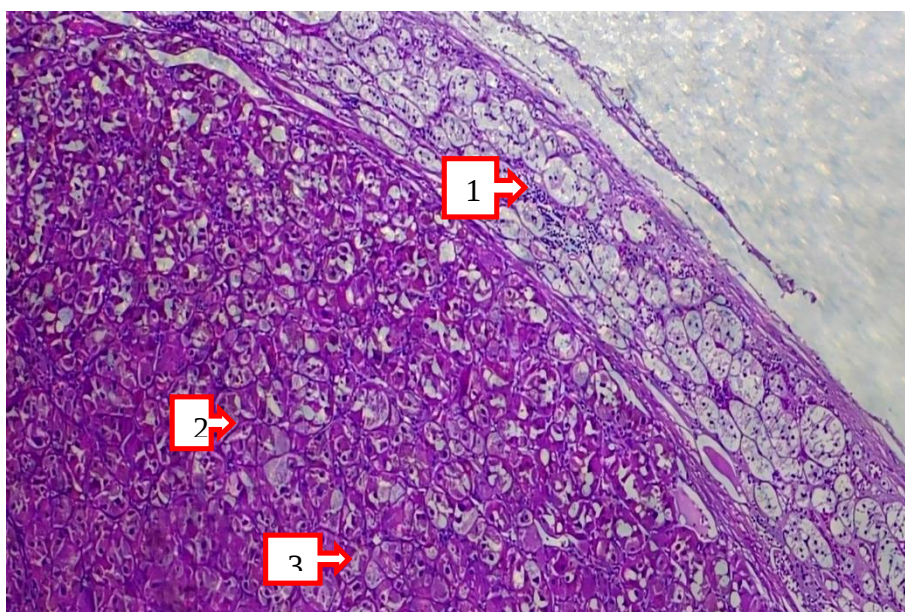


2-rasm. Tajribaviy sharoitidagi korreksiya dan keyingi 6 oylik oq zotsiz kalamushlarning buyrak usti bezi po'stloq sohasining morfologik ko'rinishi. Gem-eozin bo'yog'i. Ob 20x 40k. 1. Stromal to'qima tolalari ingichkalashgan. 2. Qon-tomirlar atrofida yosh hujayralar ko'paygan. 3. Qon-tomirlarida qon oqimi yaxshilangan.

Po'stloq va miya sohasi chegarasida joylashgan qon-tomirlar devori ingichkalashgan, bo'shlig'i kengayib, oqib kelishi orti, moddalar almashinuvi ortgan, perivaskulyar shish butunlay yo'qolgan, yosh hujayralarning ko'payganligini undan tashqari ushbu sohada kam sonli limfosit hujayralar saqlanib qolganligini ko'rishimiz mumkin. Har ikkala tomonda ham kam tabaqalashgan hujayralar guruhini rivojlangan. Bu esa regeneratsiya jarayoni tezlashganligining morfologik ko'rinishidir. Chunki yosh hujayralar sitoplazmasida lipidli kiritmalar kamroq bo'lib, gemotoksillin-eozin bo'yog'ida rangsiz ko'rinishda bo'lib, yadrosi bazafil bo'yalib, hujayraning markazida joylashganligi aniqlanildi (3-rasm). Miya sohasi hujayralar eozinofil bo'yalib, yadrosi to'q-qizg'ish bazafil rangda bo'lib, hujayralar kalta tasmachalar ko'rinishda bo'lib, ular orasida sinusoid kapillyarlar to'rida qon aylanishi ortib, qon-tomirlar devori ingichkalashgan, perivaskulyar shish to'liq yo'qolgan, regeneratsiya jarayoni tezlashganligi aniqlanildi. Miya sohaning qalinligi $13,02 \pm 0,10$ mkm dan $15,02 \pm 0,20$ mkm gacha bo'lib, o'rtacha $14,05 \pm 0,15$ mkm gacha ingichkalashganligi aniqlanildi (4-rasm). Miya sohasidagi hujayralar o'z funksiyasi va faoliyatini tezda tiklab, organizm uchun kerakli bo'lgan miqdordagi gormonlarni yetishtirib berish qobiliyatiga ega ekanligini ko'rishimiz mumkin.



3-rasm. Tajribaviy sharoitidagi korreksiyadan keyingi 6 oylik oq zotsiz kalamushlarning buyrak usti bezi po'stloq va miya qavatlari chegara sohasining morfologik ko'rinishi. Gem-eozin bo'yog'i. Ob 20x 40k. 1. Koptopchali soha hujayralari yiriklashgan va ko'paygan. 2. Tutamli sohadagi hujayralar ham yiriklashib, kengaygan. 3. To'rsimon soha hujayralari yiriklashgan va qon-tomir atrofida yosh hujayralar ko'paygan. 4. Mag'iz qavat hujayralari yiriklashgan.



4-rasm. Tajribaviy sharoitidagi korreksiyadan keyingi 6 oylik oq zotsiz kalamushlarning buyrak usti bezi po'stloq va miya sohalarning morfologik ko'rinishi. Gem-eozin bo'yog'i. Ob 20x 40k. 1. Po'stloq qavatining hujayralari yiriklashayotganligi. 2. Mag'iz qavati hujayralarining tezda ko'payib, yiriklashgan. 3. Sinusoidlarda qon aylanishi ortgan.

Xulosa. Qushqo'nmas o'simligi moyi bilan korreksiyalash natijasida buyrak usti bezi kapsulasini tashkil etuvchi, po'stloq sohasidagi tolali tuzulmalarda ya'ni fibroblastlarda oqsillarning mukoidli bo'kishi jarayoni to'xtab, shishlar yo'qolganligi, yosh qon-tomirlar ko'payganligi va ularda qon aylanishi tezlashib, regeneratsiya jarayonlar kuchayganligi, hujayralar soni oshishiga, angiogenez jarayoni jadallashuvi natijasida, fiziologik regeneratsiya jarayonlarining yuzaga kelganligi, bez hujayralari o'z funksiyasi va faoliyatini tezda tiklab, organizm uchun kerakli bo'lgan miqdordagi gormonlarni ishlab chiqarayotganligi aniqlanildi.

IQTIBOSLAR | ЧОШКИ | REFERENCES:

1. Гарсия Е. Р., и др. Противовоспалительная и анальгетическая активность извлечений из травы татарника колючего // Волгоградский научно-медицинский журнал. – 2020. – № 3. – С. 39–43.
2. Зобнин Ю. В., Немцева А. А., Перфильев Д. В., Третьяков А. Б. Острое отравление монооксидом углерода — проблема токсикологическая и неврологическая // Научный медицинский вестник Югры. – 2019. – Т. 1, № 19. – С. 33–38.
3. Кадилова Л. В. Морфологические параметры надпочечников при различных воздействиях // Amaliy va tibbiyot fanlari ilmiy jurnali. – 2023. – Т. 2, № 5. – С. 182–187.
4. Линник М. С. Гормоны коры надпочечников: физиологическая роль глюкокортикоидов // Меридиан. – 2020. – № 5(39). – С. 1–5.
5. Самойлова А. В., Билалова А. А. Отравление окисью углерода: механизм, признаки // Лучшие научные исследования студентов и учащихся : сборник научных трудов. – 2022. – С. 162–168.
6. Чумасов Е. И. Иммуногистохимическое исследование иннервации надпочечника крысы // Российский физиологический журнал им. И. М. Сеченова. – 2020. – Т. 106, № 11. – С. 1436–1450.
7. Glazova O. V., et al. Adrenal glands stem cells: general signaling pathways // Problemy Endokrinologii. – 2021. – Vol. 67, No. 6. – P. 90–97.
8. Khaleel I. M., et al. Comparative morphological and morphometrically study of the adrenal gland in adult males' squirrel (*Sciurus anomalus*) and hamster (*Mesocricetus auratus*) // Iraqi Journal of Veterinary Sciences. – 2022. – Vol. 36, No. 3. – P. 725–730.
9. Lerario A. M., Finco I., LaPensee C., et al. Molecular mechanisms of stem/progenitor cell maintenance in the adrenal cortex // Frontiers in Endocrinology. – 2017. – Vol. 8. – Art. 52.
10. Siasios A., et al. Adrenal glands of mice and rats: a comparative morphometric study // Laboratory Animals. – 2022. – Vol. 56, No. 3. – P. 247–258.

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