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ЕЖЕМЕСЯЧНЫЙ НАУЧНЫЙ ЖУРНАЛ

Медицинские новости Грузии
საქართველოს სამედიცინო სიახლენი

GEORGIAN MEDICAL NEWS

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GMN: Georgian Medical News is peer-reviewed, published monthly journal committed to promoting the science and art of medicine and the betterment of public health, published by the GMN Editorial Board since 1994. GMN carries original scientific articles on medicine, biology and pharmacy, which are of experimental, theoretical and practical character; publishes original research, reviews, commentaries, editorials, essays, medical news, and correspondence in English and Russian.

GMN is indexed in MEDLINE, SCOPUS, PubMed and VINITI Russian Academy of Sciences. The full text content is available through EBSCO databases.

GMN: Медицинские новости Грузии - ежемесячный рецензируемый научный журнал, издаётся Редакционной коллегией с 1994 года на русском и английском языках в целях поддержки медицинской науки и улучшения здравоохранения. В журнале публикуются оригинальные научные статьи в области медицины, биологии и фармации, статьи обзорного характера, научные сообщения, новости медицины и здравоохранения. Журнал индексируется в MEDLINE, отражён в базе данных SCOPUS, PubMed и ВИНТИ РАН. Полнотекстовые статьи журнала доступны через БД EBSCO.

GMN: Georgian Medical News – საქართველოს სამედიცინო სიახლენი – არის ყოველთვიური სამეცნიერო სამედიცინო რეცენზირებადი ჟურნალი, გამოიცემა 1994 წლიდან, წარმოადგენს სარედაქციო კოლეგიისა და აშშ-ის მეცნიერების, განათლების, ინდუსტრიის, ხელოვნებისა და ბუნებისმეტყველების საერთაშორისო აკადემიის ერთობლივ გამოცემას. GMN-ში რუსულ და ინგლისურ ენებზე ქვეყნდება ექსპერიმენტული, თეორიული და პრაქტიკული ხასიათის ორიგინალური სამეცნიერო სტატიები მედიცინის, ბიოლოგიისა და ფარმაციის სფეროში, მიმოხილვითი ხასიათის სტატიები.

ჟურნალი ინდექსირებულია MEDLINE-ის საერთაშორისო სისტემაში, ასახულია SCOPUS-ის, PubMed-ის და ВИНТИ РАН-ის მონაცემთა ბაზებში. სტატიების სრული ტექსტი ხელმისაწვდომია EBSCO-ს მონაცემთა ბაზებიდან.

WEBSITE

www.geomednews.com

К СВЕДЕНИЮ АВТОРОВ!

При направлении статьи в редакцию необходимо соблюдать следующие правила:

1. Статья должна быть представлена в двух экземплярах, на русском или английском языках, напечатанная через **полтора интервала на одной стороне стандартного листа с шириной левого поля в три сантиметра**. Используемый компьютерный шрифт для текста на русском и английском языках - **Times New Roman (Кириллица)**, для текста на грузинском языке следует использовать **AcadNusx**. Размер шрифта - **12**. К рукописи, напечатанной на компьютере, должен быть приложен CD со статьей.

2. Размер статьи должен быть не менее десяти и не более двадцати страниц машинописи, включая указатель литературы и резюме на английском, русском и грузинском языках.

3. В статье должны быть освещены актуальность данного материала, методы и результаты исследования и их обсуждение.

При представлении в печать научных экспериментальных работ авторы должны указывать вид и количество экспериментальных животных, применявшиеся методы обезболивания и усыпления (в ходе острых опытов).

4. К статье должны быть приложены краткое (на полстраницы) резюме на английском, русском и грузинском языках (включающее следующие разделы: цель исследования, материал и методы, результаты и заключение) и список ключевых слов (key words).

5. Таблицы необходимо представлять в печатной форме. Фотокопии не принимаются. **Все цифровые, итоговые и процентные данные в таблицах должны соответствовать таковым в тексте статьи**. Таблицы и графики должны быть озаглавлены.

6. Фотографии должны быть контрастными, фотокопии с рентгенограмм - в позитивном изображении. Рисунки, чертежи и диаграммы следует озаглавить, пронумеровать и вставить в соответствующее место текста **в tiff формате**.

В подписях к микрофотографиям следует указывать степень увеличения через окуляр или объектив и метод окраски или импрегнации срезов.

7. Фамилии отечественных авторов приводятся в оригинальной транскрипции.

8. При оформлении и направлении статей в журнал МНГ просим авторов соблюдать правила, изложенные в «Единых требованиях к рукописям, представляемым в биомедицинские журналы», принятых Международным комитетом редакторов медицинских журналов - <http://www.spinesurgery.ru/files/publish.pdf> и http://www.nlm.nih.gov/bsd/uniform_requirements.html В конце каждой оригинальной статьи приводится библиографический список. В список литературы включаются все материалы, на которые имеются ссылки в тексте. Список составляется в алфавитном порядке и нумеруется. Литературный источник приводится на языке оригинала. В списке литературы сначала приводятся работы, написанные знаками грузинского алфавита, затем кириллицей и латиницей. Ссылки на цитируемые работы в тексте статьи даются в квадратных скобках в виде номера, соответствующего номеру данной работы в списке литературы. Большинство цитированных источников должны быть за последние 5-7 лет.

9. Для получения права на публикацию статья должна иметь от руководителя работы или учреждения визу и сопроводительное отношение, написанные или напечатанные на бланке и заверенные подписью и печатью.

10. В конце статьи должны быть подписи всех авторов, полностью приведены их фамилии, имена и отчества, указаны служебный и домашний номера телефонов и адреса или иные координаты. Количество авторов (соавторов) не должно превышать пяти человек.

11. Редакция оставляет за собой право сокращать и исправлять статьи. Корректур авторам не высылаются, вся работа и сверка проводится по авторскому оригиналу.

12. Недопустимо направление в редакцию работ, представленных к печати в иных издательствах или опубликованных в других изданиях.

При нарушении указанных правил статьи не рассматриваются.

REQUIREMENTS

Please note, materials submitted to the Editorial Office Staff are supposed to meet the following requirements:

1. Articles must be provided with a double copy, in English or Russian languages and typed or computer-printed on a single side of standard typing paper, with the left margin of 3 centimeters width, and 1.5 spacing between the lines, typeface - **Times New Roman (Cyrillic)**, print size - 12 (referring to Georgian and Russian materials). With computer-printed texts please enclose a CD carrying the same file titled with Latin symbols.

2. Size of the article, including index and resume in English, Russian and Georgian languages must be at least 10 pages and not exceed the limit of 20 pages of typed or computer-printed text.

3. Submitted material must include a coverage of a topical subject, research methods, results, and review.

Authors of the scientific-research works must indicate the number of experimental biological species drawn in, list the employed methods of anesthetization and soporific means used during acute tests.

4. Articles must have a short (half page) abstract in English, Russian and Georgian (including the following sections: aim of study, material and methods, results and conclusions) and a list of key words.

5. Tables must be presented in an original typed or computer-printed form, instead of a photocopied version. **Numbers, totals, percentile data on the tables must coincide with those in the texts of the articles.** Tables and graphs must be headed.

6. Photographs are required to be contrasted and must be submitted with doubles. Please number each photograph with a pencil on its back, indicate author's name, title of the article (short version), and mark out its top and bottom parts. Drawings must be accurate, drafts and diagrams drawn in Indian ink (or black ink). Photocopies of the X-ray photographs must be presented in a positive image in **tiff format**.

Accurately numbered subtitles for each illustration must be listed on a separate sheet of paper. In the subtitles for the microphotographs please indicate the ocular and objective lens magnification power, method of coloring or impregnation of the microscopic sections (preparations).

7. Please indicate last names, first and middle initials of the native authors, present names and initials of the foreign authors in the transcription of the original language, enclose in parenthesis corresponding number under which the author is listed in the reference materials.

8. Please follow guidance offered to authors by The International Committee of Medical Journal Editors guidance in its Uniform Requirements for Manuscripts Submitted to Biomedical Journals publication available online at: http://www.nlm.nih.gov/bsd/uniform_requirements.html
http://www.icmje.org/urm_full.pdf

In GMN style for each work cited in the text, a bibliographic reference is given, and this is located at the end of the article under the title "References". All references cited in the text must be listed. The list of references should be arranged alphabetically and then numbered. References are numbered in the text [numbers in square brackets] and in the reference list and numbers are repeated throughout the text as needed. The bibliographic description is given in the language of publication (citations in Georgian script are followed by Cyrillic and Latin).

9. To obtain the rights of publication articles must be accompanied by a visa from the project instructor or the establishment, where the work has been performed, and a reference letter, both written or typed on a special signed form, certified by a stamp or a seal.

10. Articles must be signed by all of the authors at the end, and they must be provided with a list of full names, office and home phone numbers and addresses or other non-office locations where the authors could be reached. The number of the authors (co-authors) must not exceed the limit of 5 people.

11. Editorial Staff reserves the rights to cut down in size and correct the articles. Proof-sheets are not sent out to the authors. The entire editorial and collation work is performed according to the author's original text.

12. Sending in the works that have already been assigned to the press by other Editorial Staffs or have been printed by other publishers is not permissible.

**Articles that Fail to Meet the Aforementioned
Requirements are not Assigned to be Reviewed.**

ავტორთა საქურაღებოლ!

რედაქციაში სტატიის წარმოდგენისას საჭიროა დაიცვათ შემდეგი წესები:

1. სტატია უნდა წარმოადგინოთ 2 ცალად, რუსულ ან ინგლისურ ენებზე დაბეჭდილი სტანდარტული ფურცლის 1 გვერდზე, 3 სმ სიგანის მარცხენა ველისა და სტრიქონებს შორის 1,5 ინტერვალის დაცვით. გამოყენებული კომპიუტერული შრიფტი რუსულ და ინგლისურენოვან ტექსტებში - **Times New Roman (Кириллица)**, ხოლო ქართულენოვან ტექსტში საჭიროა გამოვიყენოთ **AcadNusx**. შრიფტის ზომა – 12. სტატიას თან უნდა ახლდეს CD სტატიით.

2. სტატიის მოცულობა არ უნდა შეადგენდეს 10 გვერდზე ნაკლებს და 20 გვერდზე მეტს ლიტერატურის სიის და რეზიუმეების (ინგლისურ, რუსულ და ქართულ ენებზე) ჩათვლით.

3. სტატიაში საჭიროა გაშუქდეს: საკითხის აქტუალობა; კვლევის მიზანი; საკვლევი მასალა და გამოყენებული მეთოდები; მიღებული შედეგები და მათი განსჯა. ექსპერიმენტული ხასიათის სტატიების წარმოდგენისას ავტორებმა უნდა მიუთითონ საექსპერიმენტო ცხოველების სახეობა და რაოდენობა; გაუტკივარებისა და დაძინების მეთოდები (მწვავე ცდების პირობებში).

4. სტატიას თან უნდა ახლდეს რეზიუმე ინგლისურ, რუსულ და ქართულ ენებზე არანაკლებ ნახევარი გვერდის მოცულობისა (სათაურის, ავტორების, დაწესებულების მითითებით და უნდა შეიცავდეს შემდეგ განყოფილებებს: მიზანი, მასალა და მეთოდები, შედეგები და დასკვნები; ტექსტუალური ნაწილი არ უნდა იყოს 15 სტრიქონზე ნაკლები) და საკვანძო სიტყვების ჩამონათვალი (key words).

5. ცხრილები საჭიროა წარმოადგინოთ ნაბეჭდი სახით. ყველა ციფრული, შემაჯამებელი და პროცენტული მონაცემები უნდა შეესაბამებოდეს ტექსტში მოყვანილს.

6. ფოტოსურათები უნდა იყოს კონტრასტული; სურათები, ნახაზები, დიაგრამები - დასათაურებული, დანომრილი და სათანადო ადგილას ჩასმული. რენტგენოგრამების ფოტოასლები წარმოადგინეთ პოზიტიური გამოსახულებით **tiff** ფორმატში. მიკროფოტოსურათების წარწერებში საჭიროა მიუთითოთ ოკულარის ან ობიექტივის საშუალებით გადიდების ხარისხი, ანათალების შედეგის ან იმპრეგნაციის მეთოდი და აღნიშნოთ სურათის ზედა და ქვედა ნაწილები.

7. სამამულო ავტორების გვარები სტატიაში აღინიშნება ინიციალების თანდართვით, უცხოურისა – უცხოური ტრანსკრიპციით.

8. სტატიას თან უნდა ახლდეს ავტორის მიერ გამოყენებული სამამულო და უცხოური შრომების ბიბლიოგრაფიული სია (ბოლო 5-8 წლის სიღრმით). ანბანური წყობით წარმოდგენილ ბიბლიოგრაფიულ სიაში მიუთითეთ ჯერ სამამულო, შემდეგ უცხოელი ავტორები (გვარი, ინიციალები, სტატიის სათაური, ჟურნალის დასახელება, გამოცემის ადგილი, წელი, ჟურნალის №, პირველი და ბოლო გვერდები). მონოგრაფიის შემთხვევაში მიუთითეთ გამოცემის წელი, ადგილი და გვერდების საერთო რაოდენობა. ტექსტში კვადრატულ ფხიხლებში უნდა მიუთითოთ ავტორის შესაბამისი N ლიტერატურის სიის მიხედვით. მიზანშეწონილია, რომ ციტირებული წყაროების უმეტესი ნაწილი იყოს 5-6 წლის სიღრმის.

9. სტატიას თან უნდა ახლდეს: ა) დაწესებულების ან სამეცნიერო ხელმძღვანელის წარდგინება, დამოწმებული ხელმოწერითა და ბეჭდით; ბ) დარგის სპეციალისტის დამოწმებული რეცენზია, რომელშიც მითითებული იქნება საკითხის აქტუალობა, მასალის საკმაობა, მეთოდის სანდოობა, შედეგების სამეცნიერო-პრაქტიკული მნიშვნელობა.

10. სტატიის ბოლოს საჭიროა ყველა ავტორის ხელმოწერა, რომელთა რაოდენობა არ უნდა აღემატებოდეს 5-ს.

11. რედაქცია იტოვებს უფლებას შეასწოროს სტატია. ტექსტზე მუშაობა და შეჯერება ხდება საავტორო ორიგინალის მიხედვით.

12. დაუშვებელია რედაქციაში ისეთი სტატიის წარდგენა, რომელიც დასაბეჭდად წარდგენილი იყო სხვა რედაქციაში ან გამოქვეყნებული იყო სხვა გამოცემებში.

აღნიშნული წესების დარღვევის შემთხვევაში სტატიები არ განიხილება.

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CORRELATES OF ATOPIC DERMATITIS CHARACTERISTICS IN MILITARY PERSONNEL

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Abstract.

Atopic dermatitis, despite its relatively wide distribution and low severity, was statistically often a disqualification condition for military service.

Aim: The aim of our study is to determine correlations between characteristics of atopic dermatitis in military personnel.

Material and methods: 144 people with atopic dermatitis were under our observation, 78 of them military personnel, 26 military family members and 40 civilians, 62 men and 82 women.

We studied the following characteristics: gender, age, marital status, education, social status, place of service location, genetic anamnesis, recurrence during the year, laboratory indicators of attached infections, focus of localization, other skin diseases, comorbidities, compliance with hygienic conditions, wearing a military uniform, the frequency of changing bed linen.

Results: 3-5 times recurrence a year shows a reliable positive correlation with: wearing a uniform for 12-24 hours, SSA/eosinophilia, mycosis, pathology of the respiratory system, military personnel.

Staphylococcus aureus is associated with other infections - St. hominis, fungus, also shows a reliable positive correlation: localization on the face and torso, wearing the uniform for 1 week and more. Staphylococcus hominis shows a reliable positive correlation: localization - torso, wearing uniform for 1 week or more. Shows a reliable positive correlation with fungus: localization scalp, neck, lower limb, military serviceman; reliable positive correlation with SSA/eosinophilia: increased IgE, localization on the upper limbs, mycosis, change of bed linen - once every 2 weeks; IgE - localization of dermatosis on the upper limbs and torso area, pathology of the digestive system, changing bed linen once every 2 weeks, military serviceman. It shows a reliable positive correlation with helminthiasis: Localization on the genitals, mycosis, pathology of the digestive system, change of bed linen once a month.

Conclusions: Development and recurrence of atopic dermatitis in military personnel correlates with living conditions and infections.

Determining the differences between civilian and military patient populations will allow clinicians to better investigate the risk factors that predispose to the manifestation of dermatitis in the military.

Key words. Atopic dermatitis, infections, military personnel.

Introduction.

Atopic dermatitis (AD)/eczema is an inflammatory skin disease due to the complex mutual action of environmental conditions, genetic and immunological factors. More specifically, atopic dermatitis heterogeneous disease with multifactorial etiology and complex pathophysiology, which includes the immune system and epidermal barrier dysfunction, which is influenced by environmental conditions [1].

According to the studies conducted on military personnel in certain conditions (War, peaceful situation), the climatic influence of environmental conditions on dermatological diseases is clearly visible. According to the studies, skin diseases are distributed as follows: in the military unit of hot and dry climate, 13% -38.7% of skin dermatoses in soldiers were dermatitis, AD/eczema; according to the studies of soldiers serving in hot and humid climate, bacterial infections constituted 21.2%, Mycoses -23.3%. As for the non-deployed environment skin diseases including dermatitis, atopic dermatitis / eczema -13.4% -24%, fungal diseases 5% -28%, acne 5% -43.7% [2].

Contact dermatitis is the most common manifestation of occupational dermatoses and one of the main reasons for seeking medical help by military personnel [3].

Atopic dermatitis, despite its relatively wide distribution and low severity, was statistically often a disqualification condition for military service. There are many complications of atopic dermatitis associated with military service (as opposed to civilian life), including a tendency to flare up under severe conditions, ocular complications, and risk of secondary infections [4].

The transition from civilian life to full-time military conditions can have an adverse effect on the well-being of military personnel. Military service may play a negative role in the development of physical, mental, and social health problems of military personnel, which are related to the specificity of military life: lifestyle, intensive physical activity, military training programs (field training), physical trauma; Psychological trauma is also important because of the profound differences between civilian and military life [5].

Military personnel are exposed to the same allergens and irritants as their civilian counterparts and appear to develop allergic contact dermatitis as a result of normal exposures in

everyday life. In addition, they also face different exposures that are difficult to avoid due to their professional duties. Allergic contact dermatitis can harm a military serviceman's career if he is unable to perform basic duties or avoid provoking factors. Uncontrolled contact dermatitis may result in a military member being placed on restricted duty status, requiring a change of job or rate, or leaving the military [6].

Atopic dermatitis can be provoked by any exogenous or endogenous factor. Often patients initially develop irritant contact dermatitis (ICD) and atopic dermatitis (AD) associated with several factors (trauma, moisture, heat, friction, etc.). Allergic contact dermatitis (ACD), food-protein contact dermatitis (PCD), and/or CU (chronic urticaria) may also occur later. Chronic induction urticaria (CIndU) and also other allergic dermatitis. A typical management strategy for patients relies on an accurate etiologic diagnosis. Since the potential etiologic factors and sources of exposure are numerous and varied, it is necessary to use individual specific diagnostic tests based on the clinical history to rule out delayed or immediate allergic reactions, respectively. Prevention of atopic dermatitis involves avoiding exposure to the offending agents or switching to allergen-free alternatives. Finally, prevention and effective treatment are crucial to reduce morbidity, which can affect patients' professional activities and quality of life [7].

Many military personnel complain of itching and rashes after wearing military uniforms, which are made of thick, non-porous material. This is most often due to skin irritation rather than true allergy - a more appropriate term is probable tolerance; however, potential allergens include textile dyes, azo dyes, formaldehyde resins and chromates. Atopic and purpuric contact dermatitis have also been reported in sailors wearing Navy blue uniforms [8]. Allergic contact dermatitis (ACD) caused by textiles is not uncommon. It can be caused by the dyes and other substances present in the garment. Textile fibers can cause irritation or rarely type I hypersensitivity reactions especially in atopic individuals [9].

Dermatological disease is the main source of morbidity for military personnel, both in wartime and in peacetime [10]. At a military clinic in Oslo, Norway, skin disease was the third most

common peacetime complaint after upper respiratory tract and musculoskeletal disease [11].

The aim of our study is to determine correlations between characteristics of atopic dermatitis in military personnel.

Materials and Methods.

144 people with atopic dermatitis were under our observation, 78 of them military personnel, 26 military family members and 40 civilians, 62 men and 82 women.

We studied the following characteristics: gender, age, marital status, education, social status, place of service location, genetic anamnesis, recurrence during the year, laboratory indicators of attached infections, focus of localization, other skin diseases, comorbidities, compliance with hygienic conditions, wearing a military uniform, the frequency of changing bed linen.

Statistical analysis: qualitative indicators are presented as absolute numbers and %, comparisons between groups were performed by Fisher's exact test. The relationship between the factors was determined by means of Spearman's correlation analysis. Statistical analysis was performed using the statistical software package SPSS 23.

Results.

Socio-demographic distribution of patients is given in Table 1.

As can be seen from the table, the age of 19-35 years is significantly higher among military personnel, 36-50 years - among military family members, and >50 - among civilians. Unmarried people were certainly more among military personnel. A good economic condition was marked by significantly more military personnel, and a satisfactory one by significantly more civilians.

Among the military, the frequency of persons who lived in a military unit was high (Figure 1).

Almost half (49%) of the patients studied by us live in a military unit, 28% - in a military school, 23% - in a family.

The results of the correlation analysis are presented in Table 2.

As can be seen from the table, 3-5 times recurrence a year shows a reliable positive correlation with: wearing a uniform for 12-24 hours, eosinophilia, mycosis, pathology of the respiratory

Table 1. Sociodemographic distribution of patients.

Factors		Military personnel n=78		military family members~ n=26		Civilians n=40		F	p
		n	%	n	%	n	%		
Age (years)	<18	6	7.69	4	15.38	0	0.00	2.69	0.0712
	19-35	42	53.85	12	46.15	18	45.00	14.76	<0.0010
	36-50	26	33.33	10	38.46	10	25.00	5.60	0.0046
	>50	4	5.13	0	0.00	12	30.00	1.53	0.2197
Dwelling place	city	28	35.90	14	53.85	10	25.00	2.90	0.0584
Marital status	Unmarried	36	46.15	4	15.38	2	5.00	14.52	<0.0010
	married	38	48.72	18	69.23	34	85.00	8.48	0.0003
Education	schoolchild	4	5.13	4	15.38	2	5.00	1.76	0.1766
	student	4	5.13	0	0.00	0	0.00	1.75	0.1781
	secondary education	38	48.72	6	23.08	16	40.00	2.71	0.0697
	high education	30	38.46	16	61.54	22	55.00	2.81	0.0639
Economic situation	very good	58	74.36	24	92.31	16	40.00	13.36	<0.0001
	satisfactory	16	20.51	2	7.69	20	50.00	9.78	0.0001

Table 2. Relationship between characteristics of atopic dermatitis.

	Correlation	Recurrence 3-5 times a year	Staphylococcus aureus	Staphylococcus hominis	Fungus	Eosinophilia	IgE	Helminthiasis
Staphylococcus aureus	r	0.080						
	p	0.343						
Staphylococcus hominis	r	0.145	0.296**					
	p	0.084	<0.001					
Fungus	r	0.055	0.298**	0.163				
	p	0.510	<0.001	0.051				
Eosinophilia	r	0.211*	-0.047	0.129	-0.027			
	p	0.011	0.576	0.123	0.750			
IgE	r	0.045	0.053	-0.050	-0.148	0.384**		
	p	0.594	0.530	0.549	0.078	<0.001		
Helminthiasis	r	0.070	-0.142	-0.042	0.021	0.118	-0.027	
	p	0.404	0.090	0.618	0.806	0.158	0.745	
Scalp	r	0.034	-0.068	-0.020	0.232**	0.014	-0.072	-0.060
	p	0.690	0.419	0.811	0.005	0.866	0.393	0.477
Neck	r	0.112	0.117	-0.025	0.286**	-0.052	-0.089	-0.074
	p	0.181	0.162	0.768	0.001	0.533	0.291	0.380
Face	r	-0.043	0.315**	-0.036	-0.009	-0.076	0.012	-0.107
	p	0.611	<0.001	0.670	0.917	0.368	0.890	0.203
Upper limbs	r	0.119	-0.092	-0.168*	-0.049	0.170*	0.181*	0.079
	p	0.156	0.275	0.044	0.556	0.042	0.030	0.349
Lower limbs	r	-0.039	0.161	0.145	0.298**	-0.130	-0.191*	-0.110
	p	0.640	0.053	0.084	<0.001	0.120	0.022	0.189
Torso	r	0.049	0.187*	0.179*	-0.124	-0.128	0.164*	-0.142
	p	0.559	0.025	0.032	0.138	0.127	0.049	0.090
Genitals	r	0.112	-0.084	-0.025	0.140	0.087	-0.089	0.369**
	p	0.181	0.318	0.768	0.094	0.299	0.291	<0.001
Xerosis	r	-0.043	0.024	-0.036	-0.009	0.014	0.012	0.053
	p	0.611	0.773	0.670	0.917	0.866	0.890	0.526
Other dermatitis	r	0.048	-0.097	-0.029	-0.050	0.020	-0.103	-0.086
	p	0.567	0.245	0.732	0.556	0.809	0.219	0.307
Pathology of the respiratory system	r	0.210*	-0.034	-0.066	-0.062	0.014	0.037	0.116
	p	0.011	0.685	0.432	0.460	0.871	0.663	0.168
Pathologies of the digestive system	r	-0.139	-0.072	-0.053	-0.013	0.112	0.224**	0.198*
	p	0.096	0.392	0.528	0.877	0.181	0.007	0.018
Other chronic diseases	r	-0.097	-0.048	-0.014	-0.087	0.129	-0.050	-0.042
	p	0.245	0.571	0.867	0.302	0.123	0.549	0.618
Hygienic conditions can be maintained daily	r	-0.210*	-0.155	-0.213*	-0.007	0.052	0.145	-0.116
	p	0.011	0.064	0.010	0.937	0.536	0.083	0.168
Wear the uniform for 1-12 hours.	r	-0.117	-0.197*	-0.058	-0.137	0.112	0.022	-0.204*
	p	0.162	0.018	0.488	0.101	0.183	0.791	0.014
Wearing the uniform for up to 12-24 hours	r	0.230**	0.046	-0.020	0.051	0.113	0.182*	0.050
	p	0.006	0.581	0.811	0.548	0.179	0.029	0.555
Change of linen up to 1 week	r	0.034	-0.084	-0.025	0.054	0.014	0.163	-0.060
	p	0.690	0.318	0.768	0.518	0.866	0.051	0.477
Change of Linen - 1 Week	r	0.112	-0.075	0.063	-0.152	-.246**	-0.144	-.343**
	p	0.181	0.371	0.450	0.069	0.003	0.084	<0.001
Change of linen once every 2 weeks	r	-0.106	0.176*	0.206*	-0.031	0.227**	.298**	0.147
	p	0.206	0.034	0.013	0.711	0.006	<0.001	0.078
Change of linen once a month	r	-0.054	0.091	-0.045	0.077	0.158	-0.044	0.267**
	p	0.524	0.278	0.593	0.358	0.059	0.602	0.001
Military	r	0.203*	0.047	0.109	0.199*	0.119	0.236**	-0.030
	p	0.014	0.576	0.193	0.017	0.156	0.004	0.725
Military family member	r	-0.040	0.020	-0.056	0.027	-0.142	-0.099	-0.051
	p	0.632	0.809	0.507	0.750	0.090	0.238	0.543
Civilian	r	-0.130	-0.070	-0.074	-0.267**	-0.010	-0.177*	0.077
	p	0.121	0.406	0.381	0.001	0.902	0.034	0.361

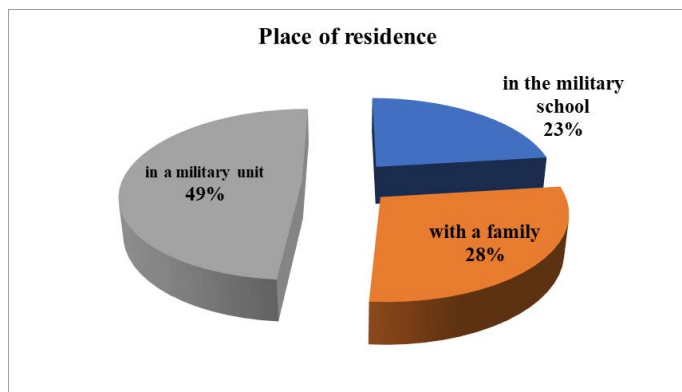


Figure 1. Place of residence of patients.

system, military personnel and shows a reliable negative correlation: Hygienic conditions can be maintained daily. Thus, the recurrence of dermatitis 3-5 times depends on long-term wearing of uniform and, accordingly, on military personnel, hygienic conditions, and mycotic infection.

Staphylococcus aureus is associated with other infections - *St. hominis*, fungus, also shows a reliable positive correlation: localization on the face and torso, wearing the uniform for 1 week and more and shows a reliable negative correlation: wearing the uniform for 1-12 hours.

Staphylococcus hominis shows a reliable positive correlation: localization - torso, wearing uniform for 1 week or more and shows a reliable negative correlation: hygiene daily.

Shows a reliable positive correlation with fungus: localization scalp, neck, lower limb, military serviceman, and negative - family member of the military. Associated infections are also related to hygienic conditions and frequency of uniform wear. Different infections correlate with different localization of atopic dermatitis.

Shows a reliable positive correlation with eosinophilia: increased IgE, localization on the upper limbs, change of bed linen - once every 2 weeks, negative - bed linen Changing - once a week, wearing a uniform for 12-24 hours, shows a reliable positive correlation with the increase of IgE - localization of dermatosis on the upper limbs and torso area, pathology of the digestive system, changing bed linen once every 2 weeks, military serviceman and negative - a civilian. Eosinophilia is associated with increased IgE, both of which are associated with military conditions.

It shows a reliable positive correlation with helminthiasis: localization on the genitals, pathology of the digestive system, change of bed linen once a month, and for the negative - wearing a uniform for 1-12 hours, change of bed linen – once a week.

Thus, among the factors of atopic dermatitis, the frequency of wearing uniforms and changing bed linen stands out.

Discussion.

The top 5 skin conditions seen in the military are usually fungal infections, atopic dermatitis/eczema, insect bite dermatitis, bacterial infections, and acne. Heat, sweating and wearing a military uniform make the condition worse. Fungal infections are common among those who wear military boots. Allergy to plants (grass), contact dermatitis or acneiform rash on the face caused by close contact with soil in field training and the use of military camouflage cream, contact dermatitis to

insect repellents, allergic reaction to items of military uniform (fabric) and military equipment (sleeping bag) Dermatological problems are the most common in the military [12]. Atopic Dermatitis skin is susceptible to *Staphylococcus aureus* infection [13]. The skin microbiota of atopic dermatitis (AD) patients is characterized by increased *Staphylococcus aureus* colonization, which exacerbates disease symptoms and has been linked to reduced bacterial diversity [14]. According to our research, *Staphylococcus aureus* in atopic dermatitis in soldiers is associated with other infections and correlates with manifestations of dermatitis on the face and torso, while *St. Hominis* correlates with localization of dermatitis on the torso, and fungi - with localization on the scalp, neck, lower limb.

It is noted that irritant dermatitis is more common in military personnel than in civilians, given the extreme military demands and the high rate of atopy in soldiers [15]. According to our research, the high frequency of dermatitis relapses is related to military personnel, the duration of wearing the uniform, the correlation with relapse is eosinophilia, pathology of the respiratory system.

Atopic dermatitis is complicated by an increased risk of skin and systemic infections [16]. According to our research, there was a relationship between bacterial characteristics and hygienic conditions, in particular, the frequency of bed linen changes, which is unsatisfactory in field conditions. Operational dermatology is of utmost importance during military missions. Undetected skin dermatitis and dermatoses can seriously affect military mission and combat effectiveness. Despite the high prevalence of skin defects in military personnel, the shortage of military dermatologists in all fields remains an obstacle to timely and effective treatment [17].

Conclusion.

Development and recurrence of atopic dermatitis in military personnel correlates with living conditions and infections.

Determining the differences between civilian and military patient populations will allow clinicians to better investigate the risk factors that predispose to the manifestation of dermatitis in the military.

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Корреляты характеристик атопического дерматита у военнослужащих

Атопический дерматит, несмотря на относительно широкое распространение и низкую степень тяжести, статистически часто являлся условием дисквалификации к военной службе.

Цель нашего исследования – определить корреляционные связи между характеристиками атопического дерматита у военнослужащих.

Материал и методы. Под наблюдением находились 144 человека с атопическим дерматитом, из них 78 военнослужащих, 26 членов семей военнослужащих и 40 гражданских лиц, 62 мужчины и 82 женщины.

Изучались следующие характеристики: пол, возраст, семейное положение, образование, социальный статус,

место службы, генетический анамнез, рецидивы в течение года, лабораторные показатели присоединенных инфекций, очаг локализации, другие кожные заболевания, сопутствующие заболевания, соблюдение гигиенических требований. условия, ношение военной формы, частота смены белья.

Результаты: 3-5-кратный рецидив в год показывает достоверную положительную корреляцию с: ношением униформы в течение 12-24 часов, ССА/эозинофилией, микозом, патологией органов дыхания, военнослужащими.

Золотистый стафилококк ассоциируется с другими инфекциями - *St. hominis*, грибок, также показывает достоверную положительную корреляцию: локализация на лице и туловище, ношение форменной одежды в течение 1 недели и более. *Staphylococcus hominis* показывает достоверную положительную корреляцию: локализация – туловище, ношение униформы в течение 1 недели и более. Показана достоверная положительная корреляция с грибок: локализация - волосистая часть головы, шея, нижняя конечность, военнослужащий; достоверная положительная корреляция с ССА/эозинофилией: повышение IgE, локализация на верхних конечностях, микоз, смена постельного белья - 1 раз в 2 недели; IgE - локализация дерматозов на верхних конечностях и области туловища, патология органов пищеварения, смена постельного белья 1 раз в 2 недели, военнослужащий. Показана достоверная положительная корреляция с гельминтозами: локализация на половых органах, микозы, патологии органов пищеварения, смена белья 1 раз в месяц.

Выводы

Развитие и рецидивирование атопического дерматита у военнослужащих коррелируют с условиями жизни и инфекциями.

Определение различий между гражданскими и военными популяциями пациентов позволит клиницистам лучше изучить факторы риска, предрасполагающие к проявлению дерматита у военнослужащих.