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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.

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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.

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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. რენტგენოგრაფიების ფოტოასლები წარმოადგინეთ პოზიტიური გამოსახულებით **tiff** ფორმატში. მიკროფოტოსურათების წარწერებში საჭიროა მიუთითოთ ოკულარის ან ობიექტივის საშუალებით გადიდების ხარისხი, ანათალების შედეგების 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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THIN MELANOMA ARISING IN NEVUS SPILUS: DERMATOSURGICAL APPROACH WITH FAVOURABLE OUTCOME

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Abstract.

Nevus spilus is a term in the literature used for a benign pigmented cutaneous lesion, occurring shortly after birth or in the early stages of infancy. The lesion itself is very distinguishable in most cases with numerous small papules or macules on a “café au lait” background pigmentation.

It can be seen on different parts of the body with predominance in the areas of the extremities.

Although benign, in some cases malignant transformation can occur. Malignant melanoma arising within a nevus spilus lesion is not so unlikely anymore.

We report a 36-year-old female patient with a thin cutaneous melanoma developing within a congenital nevus spilus lesion successfully treated with surgery.

The complete surgical removal of melanoma and nevus spilus ensures the absence of recurrences as well as the need for follow-up of patients. This surgical approach should be discussed with patients, and clinicians' recommendations depend on 1) the morphology of the lesion, 2) the size of the lesion, 3) the localization of the lesion, and last but not least : the presence or absence of stigmatization in the patients themselves.

Our main focus in this article will be on the importance of an early diagnosis and eradication of such lesions while reviewing the existing literature.

Key words. Melanoma, nevus spilus, café au lait, dermatologic surgery, skin cancer.

Introduction.

Speckled lentiginous nevus, also known in the literature as nevus spilus, is a type of melanocytic lesion in most cases with a congenital origin [1]. On histology it can mimic various types of skin formations – from different nevi to a lentigo simplex .

Despite the different names in the literature, it is considered a benign lesion, with very little chance for a malignant transformation [1]. Although rare, there are reported cases of a malignant melanoma arising within a nevus spilus lesion [1].

We present a case of a 36-year-old female with a newly diagnosed melanoma lesion within a congenital nevus spilus which was successfully removed via surgery. A further discussion of the existing literature will be done.

Case report.

A 36-year-old female came to the dermatology department with primary complaints that began in the last 2-3 years. She noticed a change in the morphology in a lesion that persisted since birth. The patient was presented with a request for a physical evaluation of the lesion and eventual therapeutic approach to be established.

Routine blood tests were performed without abnormalities. No allergies or family history for malignancy in any family member

were reported. Otherwise, the patient was in good physical condition, without reported comorbidities.

The dermatological examination showed light brown pigmentation with small dark spots located on the lower right lateral part of the hip (Figure 1a,b). Below the pigmentation another dark brown lesion with irregular borders was seen which was highly suspicious for thin cutaneous melanoma (Figure 1a,b).



Figure 1a,b. Light brown pigmentation with small dark spots located on the lower right lateral part of the hip (a,b). Below the pigmentation another dark brown lesion with irregular borders was seen which was highly suspicious for melanoma.



Figure 2a,b. First surgical session with 0.5cm in one direction and with 1cm in the other remaining directions (a-d). The lesion was preoperatively marked (a) followed by surgical excision of the formation (b,c). The defect was closed by single interrupted sutures (d).

The patient was recommended surgery. The first surgical session was performed under local anesthesia with 1 cm in 3 directions and with 0,5 cm in the other remaining direction between 11,30 and 12, 30 o' clock (Figure 2a-d). The lesion was preoperatively marked (Figure 2a) followed by surgical excision of the formation (Figure 2b,c) and sutured with single interrupted sutures (Figure 2d). The complete nevus spilus and the melanoma suspected lesion were removed simultaneously within the first surgical session. Histology revealed an acanthotic epidermis with hyperpigmentation of the rete ridges and single melanocytes in the dermal-epidermal junction which was indicative for nevus spilus. The other well-defined lesion was confirmed as melanoma with 0.8mm Breslow thickness, staged T1N0M0, without lymphovascular invasion, increased number of mitoses or perineural infiltration. Another surgical session was performed a week later because of the thin melanoma melanoma lesion under local anesthesia with 0,5 cm in all directions. The remaining defect was closed with single interrupted sutures. The patient was referred to the oncology department for subsequent observation.

Discussion.

Nevus spilus (NS) or speckled lentiginous nevus, is a type of cutaneous lesion described as a background "café au lait"-like pigmentation, 1 to 10 cm in size, with multiple small, 1- to 3-mm, macules, or papules [2-4]. On histology NS can be seen as lentiginos or different types of nevi – junctional, compound, intradermal, Spitz nevi or even blue nevi on the characteristic "café au lait" background [4].

The term nevus spilus was used for the first time by Burckley in 1842 [5] describing the pigmented patches, but the full description of the lesion was set by Ito and Hamada in 1952 [6]. NS can be found under different names in the literature: "nevus on nevus", "speckled lentiginous nevus", "speckled nevus spilus" and "spotty nevus" [7].

Despite its unique appearance, the lesion is characterized by a lack of evolutivity over the course of life [7].

It is considered a rare condition with only 0.2% to 2.3% occurrence rate in the adult population [8]. Typical areas that are affected are the skin on the trunk and extremities [9].

Rare cases of intraoral development have been described in the literature [9].

There are controversies about the development of nevus spilus. According to the literature NS can be congenital or acquired, however a strong hypothesis by Schaffer et al. [10] about NS being a subtype of congenital melanocytic nevi left the impression that these lesions are mostly if not entirely congenital [10].

Evidence in favor of the above-mentioned statement include several reports of the lesions being noticed right after or shortly after birth, the histological examination showing features of congenital melanocytic nevi, their interaction with different kinds of nevi appearing in the same lesion throughout time and distribution patterns that indicate embryonic development [10].

This statement was supported by different collectives over the time with a conclusion about NS being a congenital rather than acquired type of lesion [11].

According to other collectives the development of NS starts at birth as a background "café au lait" pigmentation and later on by the ages of 6 and 39 evolving into its characteristic appearance [12].

Similarity to acquired nevi was found to be the observed regression in some NS lesions which led to the statement by Kopf et al. [13] that some forms can regress or completely disappear over the course of time.

Another averment in favor of the similarity is the classification of NS by size and location [15]. It is considered small if the lesion > 1.5 cm, medium 1.5-19.9 cm and large for the 20 cm and above measured diameter [12] or it can be described also as segmental or zosteriform [14].

Mosaic forms with "chess board pattern" [16] or nevus spilus-type congenital melanocytic nevus [17] were also reported in the literature [14].

A comparison was made by Corradin et al. [14] between NS and a "melanocytic garden" in which different types of lesions can grow, including melanoma [12,18].

The first described case of melanoma arising in café au lait lesion of neurofibromatosis was described by Perkinson in 1957 [19].

Although malignant melanoma arising within a congenital nevus spilus is rare [20], multiple case reports have emerged since then proving the melanoma development within such lesions [21-24], often resulting in a fatal outcome [24].

Rare, but not impossible seems to be the multifocal melanoma development in a NS lesion [25]. According to Corradin et al. [21] the type of melanoma observed within a NS lesion is: 68% superficial spreading melanoma, 16% nodular melanoma and in a very few cases - in situ melanoma.

The same collective has stated that the risk factor for a malignant transformation increases with 1) the congenital or acquired early in life lesion, 2) lesion size \geq 4 cm and 3) macular type of NS [21].

In terms of diagnosis, dermoscopy remains an excellent option for a noninvasive evaluation and further observation for a potential progression of the NS lesion [4].

In case of a suspected malignant development, a biopsy could be performed to confirm the lesion's origin [4]. According to Gathings et al. [3] the presence of hair within a NS lesion (hypertrichotic NS) seemed to be an unlikely risk factor for melanoma development. However, large areas covered by NS proved to be at an increased risk for malignant melanoma transformation [26]. In this case sequential digital dermoscopy can be used for diagnosis [26].

Regular self-examinations and frequent visits to the dermatological department seem to be a must in order to rule out malignancy. Diagnosis could be difficult due to the absence of pigmentation in some lesions [27]. Wood's light examination could be used when the lesion is not very distinguishable [27].

Sometimes the clinical examination itself is not enough to predict the malignancy course and surgical prevention may be a better option for it.

Livory et al. [27] presented an interesting case of a melanoma in invisible nevus spilus where the lesion was confirmed solely on histology due to the little pigmentation of the lesion.

In our case presented, the lesion was successfully surgically removed and later on also confirmed in histology as a melanoma within a nevus spilus lesion.

In certain cases, the patient declines the surgical approach due to different personal reasons. In these case scenarios punch excisions of the speckles alone could be suggested [2] followed by close observations over time [26].

Conclusions.

Early detection of melanoma should be a top priority for every dermatologist worldwide. Dermatoscopy, close observations and regular check-ups could save the patient. In cases such as ours, the patient was caught in the early stages of melanoma development. We present a 36-year-old female with a melanoma arising within a congenital nevus spilus lesion. The surgical approach once again declared its efficiency with a successful outcome for the patient. The importance of frequent dermatological examinations was put once again.

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