

ВИПАДКИ З ПРАКТИКИDOI: 10.21802/artm.2022.3.23.155
UDC 616-006.61+616-006.63**DERMOSCOPY OF BASOSQUAMOUS CARCINOMA IN SITU**M.S. Voloshynovych¹, G.Ye. Girnyk¹, V.Ye. Tkach¹, N.R. Matkovska², N.V. Kozak¹*Ivano-Frankivsk National Medical University:*¹*Department of dermatology and venereology,**ORCID ID: 0000-0001-7619-2289, e-mail: mvoloshynovych@gmail.com;**ORCID ID: 0000-0002-9353-6490, e-mail: galingir@ukr.net;**ORCID ID: 0000-0001-5560-3923, e-mail: tkach_vasyl@ukr.net;**ORCID ID: 0000-0002-3190-5238, e-mail: nkozak@ifnmu.edu.ua;*²*Department of therapy and family medicine of postgraduate education,**ORCID ID: 0000-0002-9924-2127, e-mail: nmail4you@gmail.com;**Ivano-Frankivsk, Ukraine*

Abstract. Basosquamous carcinoma (BSC) is a rare, aggressive non-melanoma skin cancer with features that lie between those of basal cell carcinoma (BCC) and squamous cell carcinoma (SCC). BSC incidence is less than 2% of all non-melanoma skin cancers. A lot of controversies have been raised around the classification, pathogenesis, histologic morphology, biologic behavior, prognosis, and management of this tumor. Clinical differentiation from other BCC subtypes is difficult, although dermoscopic evaluation may provide some important clues. The dermoscopic pattern of BSC combines characteristics of both BCC and SCC including unfocused arborizing vessels, white structureless areas, keratin masses, ulceration or blood crusts, white structures, blue-gray blotches, and blood spots on keratin masses.

Biopsy and histologic examination remain the gold standard diagnostic method for BSC. The main published literature describes the presence of both BCC and SCC histologic characteristics with a transition zone between them. However, there is a certain controversy regarding how these features are arranged within the lesions. The correct histologic diagnosis of a BSC can be jeopardized when the biopsy is superficial and not incisional. In this scenario, the lack of deep areas of the lesion in the sample may result in the incorrect interpretation of the tumor as a classic BCC.

Intraepidermal carcinoma (IEC) has long been considered a precancerous disease due to the fact that dysplastic and atypical cells are concentrated in the epidermis. They lack the fact of penetration through the basement membrane in order to become SCC. Modern practice refers to IEC as an SCC in situ localized extragenital.

We present a case of 63 years old patient. Erythematous macula with desquamation up to 1.3 cm in diameter, located on the chest, was revealed during the survey. At a non-polarised dermoscopy with fluid immersion there was a "gelatinous stroma" through which the dense network of multiple branched vessels is clearly visible, this is typical for BCC. But unfocused arborizing vessels were visible in some sectors, white structureless areas, keratin masses, blue-gray blotches, and blood spots on keratin masses that allow us to suspect a focal transformation in BSC. In the center, there were several sectors filled with glomerular vessels, which is typical for IEC. The results of clinical and laboratory tests were within normal ranges. The dermoscopic picture combines changes that may point out BSC in the periphery and IEC in the central part of the formation. The fact of BSC worsens the patient's prognosis. BSC is characterized by an aggressive subclinical spread with higher rates of recurrence: 12–51%. We decided that immediate removal should be preferred. Taking into account the patient's age and accompanying pathology, a radical treatment method of removal by cryodestruction was chosen. During follow-up examinations, a normotrophic scar with a characteristic vascular pattern was formed on the patient's skin at the site of tumor removal.

Conclusions. In our opinion, such a vascular pattern in the center of the lesion can testify to the picture of the transformation of BCC to BSC. At this stage, BSC, in some parts of the formation, is within the epidermis, and can probably be considered BSC in situ, which could be usefully explored in further research.

Keywords: basal cell carcinoma, squamous cell carcinoma, intraepidermal carcinoma.

Introduction. Basosquamous carcinoma (BSC) is a rare, aggressive non-melanoma skin cancer. The peculiarity of BSC is the combination of characteristic features of basal cell carcinoma (BCC) and squamous cell carcinoma (SCC). BSC incidence is less than 2% of all non-melanoma skin cancers. A lot of discussion has been enhanced around the classification, pathogenesis, histologic morphology, biologic behavior, prognosis and management of this tumor [1]. It is not easy to differentiate this

pathology from other BCC subtypes; in this case dermoscopic evaluation is helpful and may provide some important clues. Dermoscopy reveals features unrecognizable during naked-eye clinical examination and it is recommended for the early recognition of skin cancer. The dermoscopic pattern of BSC combines characteristics of both BCC and SCC including unfocused arborizing vessels, white structureless areas, keratin masses, ulceration or

blood crusts, white structures, blue-gray blotches, and blood spots on keratin masses [2, 3].

IEC has long been considered a precancerous disease due to the fact that dysplastic and atypical cells are concentrated in the epidermis. They lack the fact of penetration through the basement membrane in order to become SCC. Modern practice refers to IEC as a SCC in situ localized extragenitally [5]. The probability of IEC progression in SCC varies between 3-5%. However, recent retrospective studies show up to 16% [6].

Clinically, IEC is manifested by asymptomatic, well-delineated, solitary, erythematous focus. Typical localization is a place of prolonged insolation (usually the head, neck, or limbs). It's 10-15 mm in size, prone to slow growth. The surface may be dry with peeling, or ulcerate and bleed. With the formation of the node, and the appearance of pain, you should suspect progression to SCC. Its typical dermoscopic manifestation is equally distributed glomerular vessels [7].

Biopsy and histologic examination remain the gold standard diagnostic method for BSC. The main published literature about BSC, including case series, retrospective studies, and review articles, describe the presence of both BCC and SCC histologic characteristics with a transition zone between them. However, there is a certain controversy regarding how these features are arranged within the lesions. The correct histologic diagnosis of a BSC can be jeopardized when the biopsy is superficial and not incisional. In this scenario, the lack of deep areas of the

lesion in the sample, where the squamoid characteristics often lay, may result in the incorrect interpretation of the tumor as a classic BCC [1,8].

Case Presentation. Patient A, 63 years old was examined. Erythematous macula with desquamation up to 1.3 cm in diameter, located on the chest, was revealed during the survey (Figure 1A). The spot stood out against the background of multiple angiomas, keratomas, single pigmented and intradermal nevi, as well as solar lentigo identified during the examination, which was localized on open areas of the skin. The results of clinical and laboratory tests were within age normal ranges, the abnormal values of indicators are typical for concomitant pathology. The patient has had heart failure for many years. Clinically, the formation resembles a focus of basal cell carcinoma, squamous cell carcinoma, or the initial stages of actinic keratosis without pronounced desquamation. No other formations of a similar nature were found on the skin. For the purpose of differential diagnosis, dermoscopy of the surface of the formation was performed. The dermoscopic picture is represented by a "gelatin stroma", through which a dense network of multiple branched vessels is clearly visible. This is quite typical for BCC. But in some sectors unfocused arborizing vessels, white structureless areas, keratin masses, blue-gray blotches and blood spots on keratin masses are clearly visible, which allows us to suspect a focal transformation in BSC. Moreover, in the center there are several sectors filled with glomerular vessels, which is typical for IEC (Fig. 1B).



Fig. 1A. Patient A. 63 years old Erythematous macula with desquamation on the chest.



Fig. 1B. Patient A. Non-polarised dermoscopy with fluid immersion. Heine Delta 20, 10x magnification. BSC. Glomerular vessels in the center (indicated by arrows) are typical for IEC.

The dermoscopic picture combines changes that may point out BSC in the periphery and IEC in the central part of the formation. The fact of BSC worsens the patient's prognosis. BSC is characterized by an aggressive subclinical spread with higher rates of recurrence: 12–51%

[4] we decided that immediate removal should be preferred. Taking into account the patient's age and accompanying pathology, a radical treatment method of removal by cryodestruction was chosen. During follow-up examinations, a normotrophic scar with a characteristic vascular

pattern was formed on the patient's skin at the site of tumor removal.

Conclusions:

1. In our opinion, such a vascular pattern found in the center, against the background of a combination of manifestations of BCC and BSC on the periphery, can testify to the presented picture of the transformation of BCC to BSC.
2. At this stage, BSC, in some parts of the formation, is within the epidermis, and can probably be considered BSC in situ.
3. This may be of particular interest and provide additional information on the origin of the BSC, which could be usefully explored in further research.

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ДЕРМОСКОПІЯ БАЗОСКВАМОКАРЦИНОМИ IN SITU

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Резюме. Базосквамокарцинома (БСК) рідкісний, агресивний немеланомний рак шкіри, ознаки якого мають спільні риси з базальноклітинною карциномою (БКК) та плоскоклітинною карциномою (ПКК). Захворюваність на БСК складає менше 2 % від всіх немеланомних раків шкіри. Багато суперечок виникають довкола класифікації, патогенезу, гістоморфології, біологічної поведінки, прогнозу та ведення цих пухлин. Клінічна диференціація від інших підтипів БКК складна, дермоскопічне дослідження може надавати деякі важливі ознаки. Дермоскопічні патерни БСК поєднують характеристики БКК та ПКК, включаючи нечіткі розгалужені судини, білі безструктурні ділянки, кераинові маси, звирозумування чи геморагічні кірочки, білі структури, синьо-сірі вкраплення та кров'яні плями на кератинових масах. Інтраепідермальна карцинома (ІЕК) чи хвороба Боуена розглядається як ПКК in situ. Її типовий дермоскопічний прояв рівномірно розподілені клубочкові судини.

В публікації розглянуто випадок 63 річного пацієнта. Під час огляду виявлено еритематозну пляму з лущенням діаметром до 1.3 см., розташовану на тулубі. Під час неполярної дермоскопії з використанням імерсійної рідини крізь «желатинову струму» визначається мереживо з чітко видимих множинних розгалужених судин, що типово для БКК. Проте в деяких секторах розгалужені судини не чіткі, визначаються білі безструктурні зони, кераинові маси, синьо-сірі вкраплення та кров'яні плями на кератинових масах, що дозволяють запідозрити трансформацію в БСК. В центральній частині кілька секторів заповнені клубочковими судинами, що типові для ІЕК.

Висновки. На нашу думку, виявлення такого судинного патерну в центрі може бути свідченням трансформації БКК в БСК. На цій стадії БСК на окремих ділянках утворення знаходиться в межах епідермісу та може бути розглянута як БСК in situ, що можна було би з користю вивчити в наступних дослідженнях.

Ключові слова: базальноклітинна карцинома, плоскоклітинна карцинома, внутрішньоepідермальна карцинома.

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