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CASE REPORTS

LINEAR POROKERATOSIS

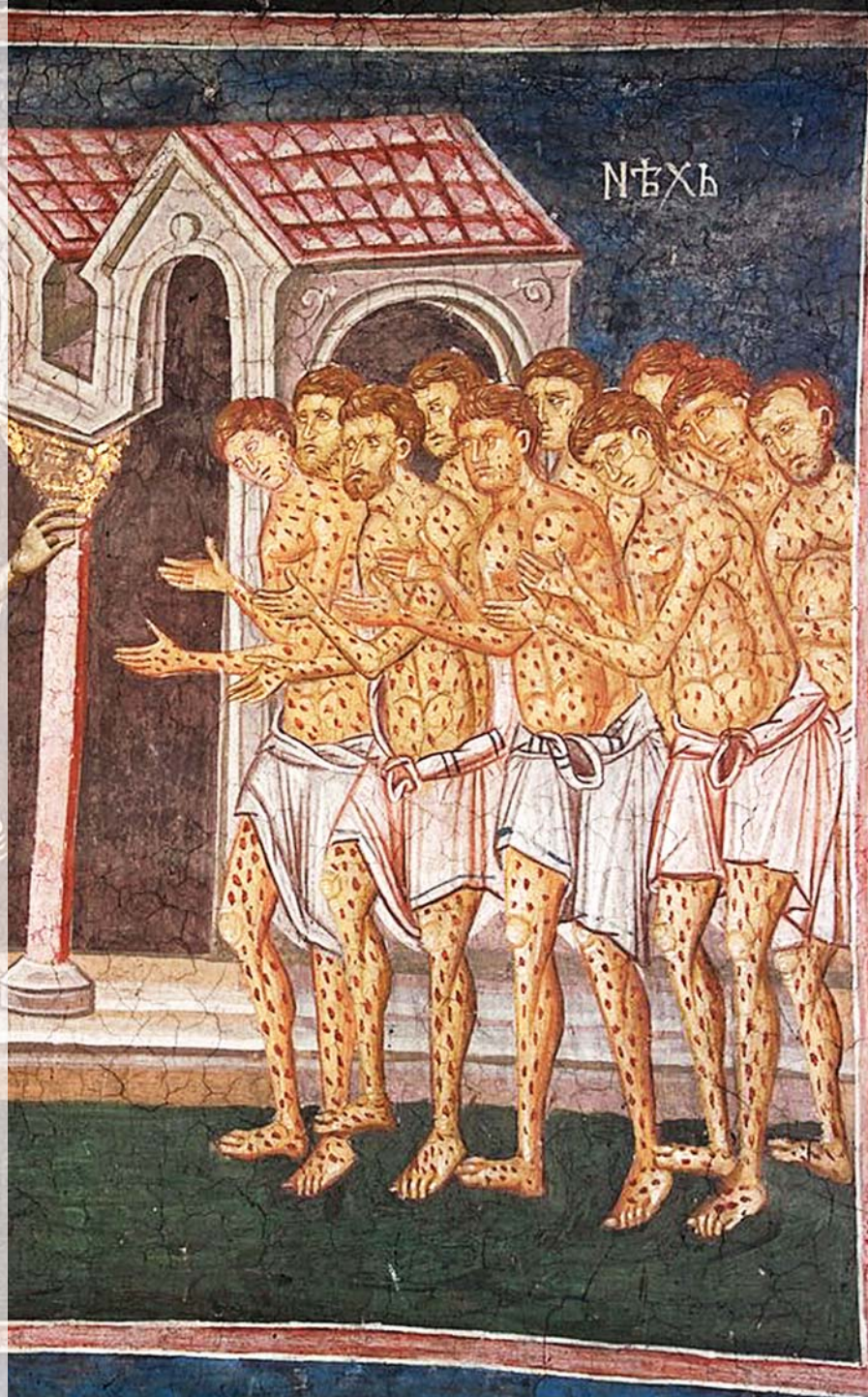
**ATYPICAL GENITAL SYPHILIS IN
HIV-NEGATIVE HOMOSEXUAL MEN**

CUTANEOUS BLASTOMYCOSIS

**HISTORY OF MEDICINE
THE 2ND CONGRESS
OF THE PAN-SLAVIC ASSOCIATION
OF DERMATOVENEREOLOGISTS**

REPORTS

FORTHCOMING EVENTS



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Linear porokeratosis: a case report

Slobodan STOJANOVIĆ*, Marina JOVANOVIĆ, Nada VUČKOVIĆ,
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Abstract

Porokeratosis is a rare genodermatosis based on chronic keratinization disorder histologically characterized by the presence of a cornoid lamella and various clinical manifestations. Five most commonly described types of porokeratosis are porokeratosis of Mibelli or "classic" porokeratosis, disseminated superficial actinic porokeratosis, disseminated palmoplantar porokeratosis, linear porokeratosis, and punctate porokeratosis. In all of the five clinical types of porokeratosis described today, cases of planocellular skin carcinoma are described, except in punctate type cases. Use of topical CO₂ laser ablation, cryotherapy and topical use of 5% Imiquimod cream, have shown favorable effects in local treatment of porokeratosis. The authors present a clinical case of a girl suffering from linear porokeratosis over the course of the last four years, spreading on the inside of her right arm along the lines of Blaschko. Linear porokeratosis was histologically confirmed by biopsy of skin lesions and dermoscopy. Dermoscopic findings, used as an auxiliary method, also indicated linear porokeratosis. Successful liquid nitrogen cryotherapy prompted the authors to present a case in which the applied treatment proved to be successful, but also to emphasize the need for timely treatment in order to prevent malignant alterations of these changes.

Key words

Porokeratosis; Dermoscopy; Cryotherapy; Treatment Outcome

The "classic" type of porokeratosis (PK) was first described by Mibelli in 1983 (1, 2), as a condition which usually occurs in childhood, manifesting by one or several discreet keratotic plaques with desquamation, that may be present on any part of the skin and/or mucous membranes (3). That same year, Respighi described the disseminated superficial type of the disease, while the disseminated superficial actinic PK was described by Chernosky in 1967 (4). The linear type of PK was first described in 1918. In 1971, Guss was the first to describe the disseminated palmoplantar PK (5). In 1974, Rahbari defined linear PK as a separate form of the disease (6), and in 1977, the punctate PK was added to other clinical types (7).

Porokeratosis is considered a genetic disorder characterized by autosomal dominant way of transmission, but most cases develop sporadically

(8). Generally speaking, "classic porokeratosis" is more common in men, even up to 2-3 times, while the ratio in favor of males in cases of disseminated palmoplantar porokeratosis is 2:1. Disseminated superficial actinic porokeratosis is a female-predominant disease with a female to male ratio of 3:1 (8). According to data provided by The Singapore National Center, the incidence of linear PK, as a clinical type among different clinical types of the disease, is 12.9% and it is most commonly detected in the fourth decade of life (9). Linear type of PK is found/ in: monozygotic twins (10, 11) and families in which other types of PK are present (11, 12); its mode of transmission remains unknown (8, 11); the ratio of male to female porokeratosis cases is 1:1 and it is more common in Caucasians (11).

Porokeratosis commonly affects extremities in the form of small, asymptomatic, distinct keratotic and/

or lichenoid papules or plaques, ranging from brown to skin color, and from one to several centimeters in diameter, with distinct keratotic edges and hypo-or-hyperpigmented slightly depressed atrophic centers. Various skin changes can occur, but the ones typical for linear porokeratosis are localized, unilateral and follow the lines of Blaschko. Cases of malignant alterations have been reported in all 5 clinical types of PK, mostly planocellular skin carcinoma (PSC) within the porokeratosis lesions (8), except in cases of punctate type of PK (11).

In this paper, the authors present a case of a young female patient with linear porokeratosis, present in the course of the last four years, affecting the inside of the right arm following the lines of Blaschko. Successful liquid nitrogen cryotherapy performed in the patient prompted the authors to present a case in which the applied treatment proved to be successful, but also to emphasize the need for timely treatment in order to prevent malignant alterations of these changes.

Case report

We present a case of a 27-year-old pharmacy student, otherwise healthy, who visited the Outpatient

Clinic of the Clinical Center of Vojvodina in Novi Sad in 2009, with skin changes in the form of linear keratotic lesions running along the inside of her right arm. These changes first appeared four years earlier on the inside of her right humerus region, gradually spreading to the lower arm, without any subjective symptoms. After clinical examination, dermoscopy was performed, followed by skin biopsy of lesions. The diagnosis of linear porokeratosis was histologically confirmed. With the patient's consent, cryotherapy was applied to all skin lesions on her right arm. Complete regression of skin lesions occurred after 8 weeks of treatment.

Personal history revealed that the patient never had any contraindications for liquid nitrogen cryotherapy.

Family history revealed that none of her relatives had similar skin lesions or suffered from any kind of skin condition. There was no history of malignant tumors among immediate family members.

Clinical examination showed that on the inside of the right arm, particularly on the 2/3 of the entire humerus and forearm, characteristic keratotic papules and/or small plaques were present, 0.5 to 2 cm in



Figure 1. Linear porokeratosis; a) on the forearm b) on the upper arm and cubital fossa

diameter, oval to round shaped, with distinct edges separating them from the surrounding healthy skin, light to dark brown, with accentuated keratotic edges, hard in consistency, with slightly depressed, and a hypo- or hyperpigmented atrophic center. The lesions were located along the inside of the right arm, in a linear arrangement, running parallel within a distance of a few centimeters (Figures 1, and 2.).



Figure 2. Linear porokeratosis: changes on the forearm (detail/close up)

General examination of all organs and systems was regular.

All the basic laboratory tests and biochemical results were within normal ranges.

Histopathological examination revealed that the skin sample, stained by HE method (hematoxylin and eosin), PAS (periodic acid–schiff stain), and Gomori's and Giemsa methods, was affected by moderate epidermal hyperkeratosis and partial parakeratosis. In this region, epidermis was moderately thickened, with an angular keratotic layer towards the center of the lesion. Dyskeratotic cells were found in the middle layer along the zone affected by porokeratosis (cornoid lamella), while the granular layer of the epidermis was missing. Perivascular mononuclear cells were present in the papillary dermis. The remaining skin showed adequate and age-appropriate morphology (Figures 3. and 4.).

Dermoscopy was performed using a manual dermatoscope Heine Delta 20 (Heine Optotechnik, Kientalsrasse 7, D-82211 Hersching, Germany) with 10 x magnification, using non-polarized light, after covering porokeratosis lesions with ultrasound gel.

Dermoscopy showed round structures in the form of a “white line” along the edge of each porokeratosis lesion, which is a characteristic dermoscopic finding for porokeratosis. They were identified at the periphery of the lesion along with brown pigmentation on the inside and a double “white line” (arrow) in some parts of the lesion. Structures found in the form of a single or a double “white line” at the edge of the PK lesion histologically matched the cornoid lamella (Figure 5.) (13).

Therapy was conducted using the open spray method with the Cry-Ac®-3 Brymill devices (Brymill Cryogenic Systems Bld 2. 105, Windermere Ave., Ellington, CT 06029 USA). The liquid nitrogen application lasted 30 seconds with a 2mm halo, in two cycles with a four-week period in between. Follow-ups were performed every four weeks combined with local application of an antibiotic cream. In addition to the usual post-therapeutic reactions, such as the appearance of small blisters and a light burning sensation during the first 48 hours following the treatment, no other objective and subjective symptoms were reported. After 8 weeks, there was a complete regression of the treated lesions (Figure 6.).

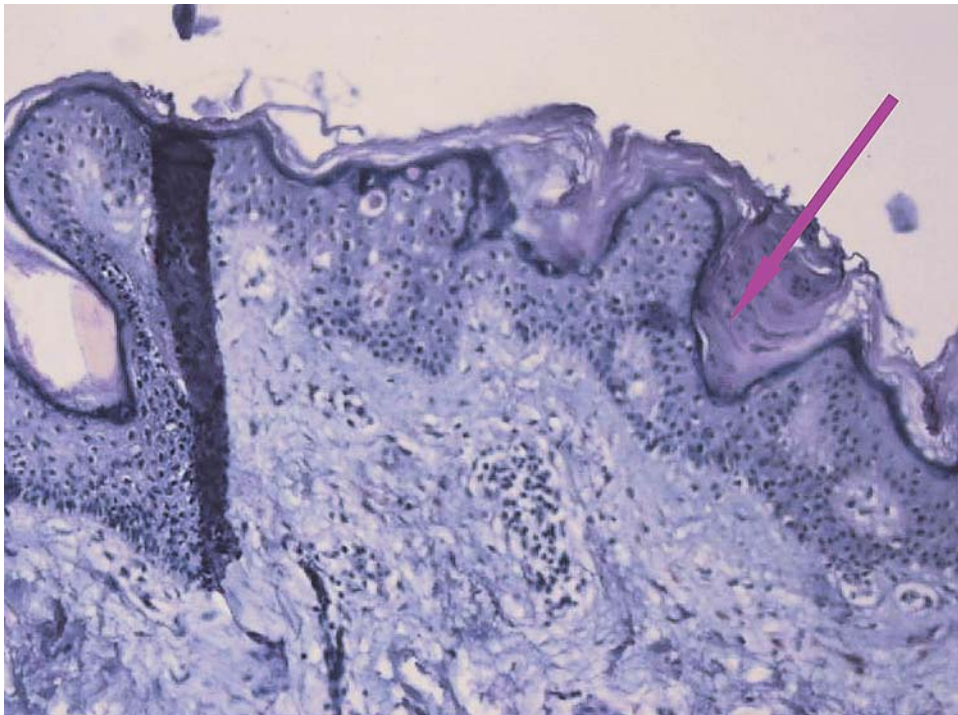


Figure 3. Pathohistological finding: cornoid lamella angulated towards the center of the lesion (hematoxylin and eosin, x200)

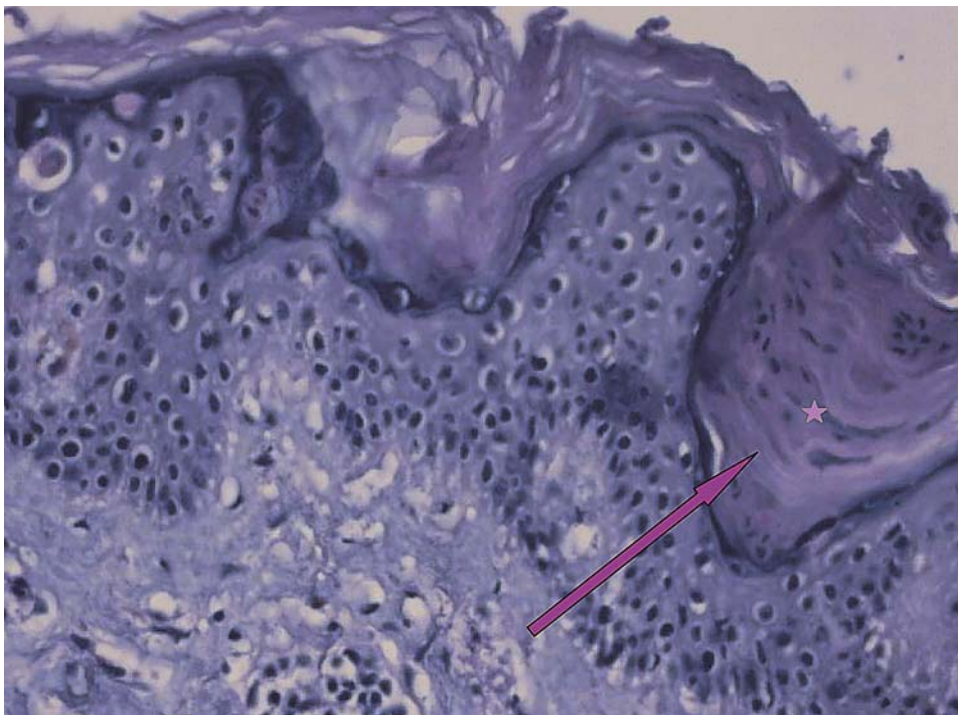


Figure 4. Pathohistological finding of linear porokeratosis: A column of parakeratosis (cornoid lamella indicated by an arrow) angulated towards the center of the lesion (indicated by a star); the underlying epidermis shows focal loss of the granular cell layer (hematoxylin and eosin, x10)

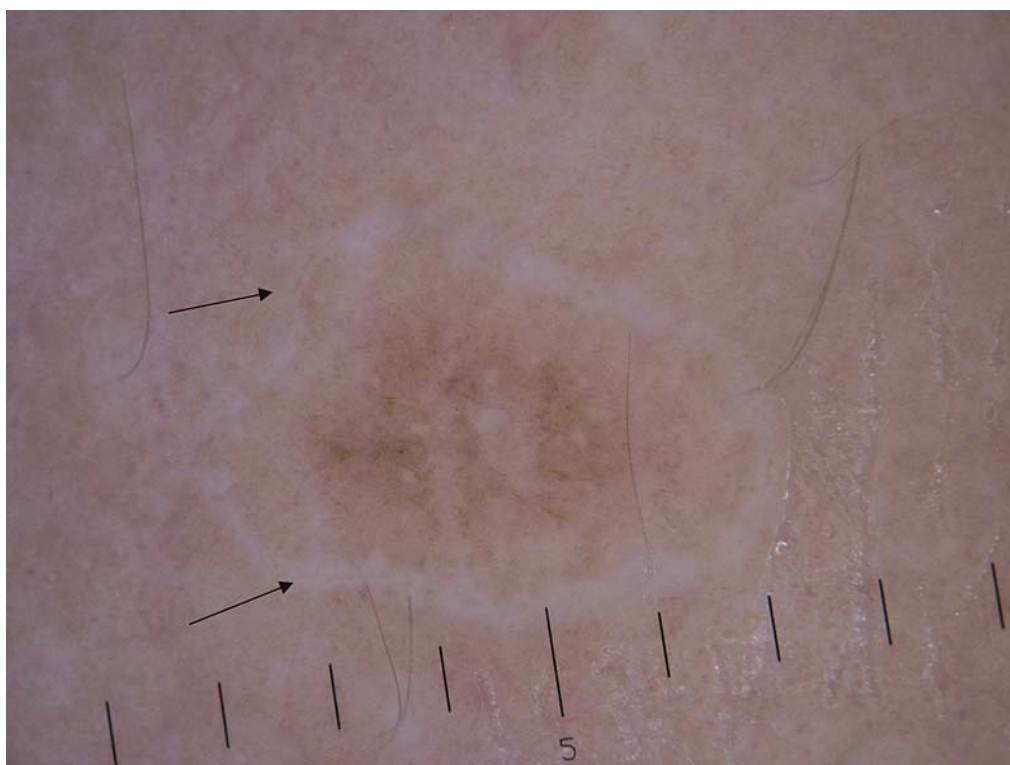


Figure 5. Dermoscopy finding of linear porokeratosis: characteristic annular whitish structure „white track“ that sharply demarcates a central scar-like area with “double white track” (arrow) in some parts of the lesion (x10).

Discussion

Porokeratosis represents a whole spectrum of cutaneous/mucous clinical and morphological entities characterized by severe keratinization disorder, typical histological features and predisposition to development of cutaneous malignancies. The exact mechanism of carcinogenesis is still unknown, but it is assumed that the mediator in this process is increased expression of p53 gene, which was immuno-histochemically detected in skin changes of those suffering from porokeratosis (14). The presence of p53 mutations is probably a direct result of UV irradiation (11). Our case was one of linear porokeratosis located on the inside of the right arm in a spot directly exposed to sun during periods when short-sleeve and sleeveless garments are worn.

As a genetically heterogeneous disorder, porokeratosis is characterized by histopathological changes and cornoid lamella formation, which increases the risk of skin cancer (11). At the same time, an important mechanism in the development of many types of cancer is the loss of allelic heterozygosity. Considering the fact that it was recently assumed

that linear porokeratosis occurs also due to loss of allelic heterozygosity, it may be expected that linear porokeratosis lesions are particularly prone to malignant alteration. These results have been confirmed by certain studies (14, 15). According to literature data, planocellular skin carcinoma develops in the regions affected by linear porokeratosis (16). Critical review of skin cancer development within porokeratosis lesions showed an incidence of 7% (17).

The literature describes different types of porokeratosis simultaneously affecting one person (12, 18) and immunosuppressed patients after renal or bone marrow transplantation, which refers specifically to the superficial type of the disease (19, 20).

In our case, apart from clinical and pathohistological confirmation of the diagnosis, we additionally performed a dermoscopic examination of porokeratosis linear lesions and the obtained results were consistent with the ones previously published (13).

Various therapeutic modalities that have been successfully applied in the treatment of linear porokeratosis do not favor any method for the time



Figure 6. Linear porokeratosis after local cryotherapy

being (3, 9, 11). The efficacy of systemic therapy of PK with Etrretinate or retinoids has been previously described (3, 21, 22). In the case described herein, local cryotherapy has proven effective, which was confirmed by the results of other authors (23, 24). Photodynamic therapy has also proved effective (25) as well as local use of CO₂ laser and Imiquimod cream application (26, 27).

Conclusion

In the presented case of linear porokeratosis, which is a rare genokeratosis, the authors emphasize the necessity

of timely therapy in order to prevent malignant alterations within the lesions and demonstrate favorable therapeutic effects of a simple and widely available method of cryotherapy.

References:

1. Mibelli V. Contributo alla studio della ipercheratosi dei canali sudoriferi (porokeratosi). *G Ital Dermatol Venereol* 1893;28:313-55.
2. Happle. Mibelli revisited: a case of type 2 segmental porokeratosis from 1893. *J Am Acad Dermatol* 2010;62:136-8.
3. Mehta V, Balahandran C. Simultaneous co-occurrence of porokeratosis of Mibelli with disseminated superficial actinic porokeratosis. *Indian J Dermatol* 2009;54(4):390-1.
3. Judge MR, McLean WHI, Munro CS. Disorders of Keratinization. In: Burns T, Breathnach S, Cox N, Griffiths C, editors. *Rook's Textbook of Dermatology*. 6th ed. Oxford: Blackwell Publishing Ltd; 2010. pp. 19.1-121.
4. Chernosky ME, Freeman RG. Disseminated superficial actinic porokeratosis (DSAP). *Arch Dermatol* 1967;96:611-24.
5. Guss SB, Osbourn RA, Lutzner MA. Porokeratosis plantaris, palmaris, et disseminata: a third type of porokeratosis. *Arch Dermatol* 1971;104(4):366-73.
6. Rahbari H, Cordero AA, Mehregan AH. Linear porokeratosis: a clinical variant of porokeratosis of Mibelli. *Arch Dermatol* 1974;109:526-8.
7. Rahbari H, Cordero AA, Mehregan AH. Punctate porokeratosis: a clinical variant of porokeratosis of Mibelli. *J Cutan Pathol* 1977;4:338-41.
8. Zdelar D. Porokeratoza. U: Karadaglic D. *Dermatologija*. Beograd: Vojnoizdavački Zavod; 2000. Str. 482-8.
9. Leow YH, Soon YH, Tham SN. A report of 31 cases of porokeratosis at the National Skin Centre. *Ann Acad Med Singapore* 1996;25(6):837-41.
10. Malhotra SK, Puri KJ, Goyal T, Chahal KS. Linear porokeratosis. *Dermatol Online J* 2007;13(4):15.
12. Murase J, Gilliam AC. Disseminated superficial actinic porokeratosis co-existing with linear and verrucous porokeratosis in an elderly woman: Update on the genetics and clinical expression of porokeratosis. *J Am Acad Dermatol* 2010;63:886-91.
13. Delfino M, Argenziano G, Nino M. Dermoscopy for the diagnosis of porokeratosis. *J Eur Acad Dermatol Venereol* 2004;18:194-5.
14. Arranz-Salas I, Sanz-Trelles A, Ojeda DB. p53 alterations in porokeratosis. *J Cutan Pathol* 2003;30(7):455-8.
15. Happle R. Cancer proneness of linear porokeratosis may be explained by allelic loss. *Dermatology* 1997;195(1):20-5.
16. Lozinski AZ, Fisher BK, Walter JB, Fitzpatrick PJ. Metastatic squamous cell carcinoma in linear porokeratosis of Mibelli. *J Am Acad Dermatol* 1987;16(2 Pt2):448-51.
17. Goerttler EA, Jung EG. Porokeratosis of Mibelli and skin carcinoma: a critical review. *Humangenetik* 1975;26(4):291-6.
18. Mehta V, Balahandran C. Simultaneous co-occurrence of porokeratosis of Mibelli with disseminated superficial actinic porokeratosis. *Indian J Dermatol* 2009;54(4):390-1.
19. Knoell KA, Patterson JW, Wilson BB. Sudden onset of disseminated porokeratosis of Mibelli in a renal transplant

patient. *J Am Acad Dermatol* 1999;41(5 Pt 2):830-2.

20. Andrew FA, Busam K, Myskowski LP. Porokeratosis of Mibelli following bone marrow transplantation. *Int J Dermatol* 2006;45: 361-5.

21. Goldman GD, Milstone LM. Generalized linear porokeratosis treated with etretinate. *Arch Dermatol* 1995;131(4):496-7.

22. Hong JB, Hsiao CH, Chu CY. Systematized linear porokeratosis: a rare variant of diffuse porokeratosis with good response to systemic acitretin. *J Am Acad Dermatol* 2009;60(4):713-5.

23. Bhushan M, Craven NM, Beck MH, Chalmers RJ. Linear porokeratosis of Mibelli: successful treatment with cryotherapy. *Br J Dermatol* 1999;141(2):389.

24. Dereli T, Ozyurt S, Ozturk G. Porokeratosis of Mibelli: successful treatment with cryosurgery. *J Dermatol* 2004;31(3):223-7.

25. Cavicchini S, Turlaki A. Successful treatment of disseminated superficial actinic porokeratosis with methyl aminolevulinate-photodynamic therapy. *J Dermatol Treat* 2006;17:190-1.

26. Harrison S, Sinclair R. Porokeratosis of Mibelli: successful treatment with topical 5% imiquimod cream. *Australas J Dermatol* 2003;44(4):281-3.

27. Montes-De-Oca-Sanchez G, Tirado-Sanchez A, Garcia-Ramirez V. Porokeratosis of Mibelli of the axillae: treatment with topical imiquimod. *J Dermatol Treat* 2006;17(5):319-20.

Porokeratoza

Sažetak

Uvod: Porokeratoza predstavlja retku genodermatozu u čijoj osnovi se nalazi hronični poremećaj keratinizacije sa karakterističnim histološkim nalazom kornoidne lamele i različitim kliničkim ispoljavanjem. Naj-češće se opisuje 5 tipova porokeratoze: "klasična" porokeratoza Mibelli, diseminovana superficijalna aktinička porokeratoza, diseminovana palmoplantarna porokeratoza, linearna porokeratoza i punktatna porokeratoza. U svim do danas poznatim kliničkim tipovima porokeratoze, opisani su slučajevi nastanka planocelularnog karcinoma kože, izuzev kod punktatnog oblika. U lokalnoj terapiji porokeratoze, povoljan terapijski efekat su ispoljili: CO₂-laser, krioterapija i lokalna primena 5% imikvimod krema. Prikaz slučaja: Autori prikazuju slučaj devojke sa linearnom porokeratozom prisutnom tokom poslednje četiri godine, koja je zahvatila desnu ruku sa unutrašnje strane, pružajući se duž Blaškovihi linija. Nalaz linearne porokeratoze potvrđen je histološki posle uzete biopsije kožnih promena, a urađen je i pregled metodom dermoskopije. Dermoskopski nalaz, kao pomoćni dijagnostički metod, takođe je ukazivao na linearni oblik porokeratoze. Uspešna krioterapija tečnim azotom, koja je sprovedena kod bolesnice, navela je autore da prikažu ovaj slučaj u kome se primenjena metoda lečenja porokeratoze pokazala uspešnom, ali i da bi istakli potrebu blagovremene terapije porokeratoze sa ciljem prevencije maligne alteracije u ovim promenama.

Diskusija: „Klasičan oblik“ porokeratoze (PK) prvi je opisao Mibelli 1893. godine (1, 2) kao oboljenje

koje se obično pojavljuje u detinjstvu u vidu jednog ili nekoliko diskretnih keratotičnih plakova sa deskvamacijom, koji se mogu pojaviti na bilo kom delu kože i/ili sluznicama (3). Respighi iste 1893. godine opisuje diseminovani superficijalni oblik PK, a 1967. godine Chernosky daje detaljan opis diseminovane superficijalne aktiničke forme bolesti (4). Linearni oblik PK prvi put je opisan 1918. godine. Guss 1971. godine prvi opisuje diseminovanu palmoplantarnu PK (5). Rahbari 1974. godine izdvaja linearnu PK kao posebnu formu bolesti (6), a 1977. godine kliničkim oblicima PK dodaje punktatni oblik (7).

PK se smatra naslednom bolesti sa automnodominantnim načinom prenosa, ali najveći broj slučajeva nastaje sporadično (8). Inače, „klasična“ PK je češća kod muškaraca, čak 2-3 puta, dok je kod palmoplantarne diseminovane PK odnos muškarci : žene – 2:1. Kod diseminovane aktiničke PK postoji predominacija ženskog pola nad muškim u odnosu 3:1 (8). Učestalost linearne porokeratoze kao kliničkog oblika među svim ostalim kliničkim oblicima porokeratoze prema podacima Nacionalnog centra u Singapuru iznosi 12,9 % i obično se otkriva u četvrtoj deceniji života (9). Linearni oblik PK je nađen kod monozigotnih blizanaca (10, 11) i u porodicama u kojima su istovremeno prisutni i ostali oblici PK (11, 12); ostaje nepoznat način prenošenja (8, 11); odnos polova je 1:1 i češći se javlja kod pripadnika bele rase (11).

PK najčešće zahvata ekstremitete u vidu malih, asimptomatskih, keratotičnih i/ili lihenoidnih papula ili plakova smeđe do boje kože, koji su oštro ograničeni,

promera jednog do nekoliko centimetara, sa naglašenom keratotičnom ivicom tvrde konzistencije sa hipopigmentovanim ili hiperpigmentovanim centrom koji se lako uleže; atrofičnog je izgleda. Kod linearne PK mogu nastati multiple promene, zatim lokalizovane i unilateralne, slede Blaškove linije na koži. U svim do danas poznatim kliničkim tipovima PK, opisani su slučajevi maligne alteracije i nastanka, najčešće

planocelularnog karcinoma kože (PCK) u lezijama PK (8), izuzev kod punktatnog oblika (11).

Zaključak: U ovom radu, autori prikazuju slučaj devojke sa linearnim porokeratozom, prisutnom unazad četiri godine, koja je zahvatila desnu ruku sa unutrašnje strane, pružajući se duž Blaškovih linija, da bi istakli potrebu blagovremene terapije porokeratoze radi prevencije maligne alteracije u ovim promenama.

Ključne reči

Porokeratoza; Dermoskopija; Krioterapija; Ishod lečenja

Atypical presentations of primary genital syphilis in HIV-negative homosexually active men: a case series

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Abstract

We report four cases of primary syphilis of the penis in HIV-negative men having unprotected insertive oral sexual intercourse with men. Patients presented with atypical penile lesions mimicking genital herpes, balanitis, lichen planus and fixed drug eruption. Syphilis should be considered in the differential diagnosis of other genital diseases, both sexually or non-sexually transmitted. Considering the increasing incidence of atypical manifestations of syphilis, serological tests for syphilis should also be performed more often.

Key words

Syphilis; Syphilis Serodiagnosis; Penile Diseases; Sexual Behavior; Homosexuality, Male

Primary genital syphilis in men is clinically detectable after an incubation period of about of 3 weeks. A typical syphilitic chancre is a sharply demarcated, painless, indurated ulcer with a smooth base and rolled margins, usually more than 0.5 cm in diameter. Primary syphilitic lesions may affect any area of the skin or mucous membranes, but usually appear on genitals, often situated in the coronal sulcus in men and are frequently associated with nontender bilateral regional adenopathy. However, the majority of genital syphilitic lesions in the primary stage are misdiagnosed, because of atypical presentations (1).

The outbreak of early syphilis cases occurred among men who had sex with men (MSM) from March to June, 2010 in Belgrade.

Herein, we describe four cases of primary syphilis in HIV-negative homosexual men who visited the City Institute for Skin and Venereal Diseases, all with penile lesions and regional lymphadenopathy. All patients reported unprotected insertive oral sex with unknown partners one month before referral to our Institute.

Following the initial clinical assessment, the diagnosis of primary syphilis was confirmed by positive serological tests: nontreponemal test (Venereal Disease Research Laboratory -VDRL) and specific *Treponema Pallidum* Hemagglutination Assay (TPHA). Dark filed microscopy of primary lesions was not performed due to technical limitations. Patients were treated with a single dose of intramuscular benzathine penicillin G, 2.4 million units. During the follow up, lesions resolved in all patients within the next 20 days post-treatment.

Case reports

Case 1

A 30 year-old man presented with multiple, painless penile ulcers which appeared approximately 20 days after insertive oral sex. He was referred to our Institute with the diagnosis of genital herpes by his general practitioner. The lesions first appeared as red macules, which ulcerated by the time the patient was referred to the Institute, so at the examination he presented

with a dozen of small grouped ulcers on the prepuce and glans penis (Figure 1.). Physical examination revealed enlarged and painful regional lymph nodes, but there were neither general symptoms nor other skin/mucous lesions. The patient's personal history did not indicate any previous sexually transmitted infections (STIs). Serological tests for syphilis were positive: VDRL (titer 1:8) and TPHA test.

Case 2

A 25 year-old man presented with multiple, painless, shallow erosions on the prepuce and glans penis with mild circular lymphangitis above the coronal sulcus and enlarged, nontender regional lymphadenopathy (Figure 2.). His personal history showed that erosions with crusts first appeared 3 weeks after insertive oral sex. The initial erosions and crusts were already treated by a dermatologist with saline dressing and topical antibiotic cream for two weeks, and then the patient

was referred to our Institute as balanoposthitis. The lesions remained unchanged during this time. Physical examination revealed no other skin lesions. Serological tests were routinely performed and revealed positive TPHA with VDRL titer 1:4.

Case 3

A 31 year-old man presented with two erythematous, lichen planus-like papules on the penile shaft (Figure 3.). The lesions appeared 4 weeks before referral, coexisting with nontender, inguinal lymphadenopathy and remained unchanged during that period. Moreover, at physical examination, lesions were still papular, non-ulcerated, while nongenital skin and mucous membranes were intact. The patient's personal history revealed an episode of primary genital syphilis in 2006, that was successfully treated in our Institute. Serological tests were performed, and VDRL test was positive with titers 1:16, with TPHA test being positive as well.



Figure 1. A dozen of nonindurated, herpetiform, sharply margined ulcers on the prepuce and glans penis, coalescing to irregular ulcerated lesions in the coronal sulcus



Figure 2. Multiple superficial erosions, mainly of circular distribution over the coronal sulcus on the prepuce and glans penis



Figure 3. Lichenoid pink shiny papules on the shaft of the penis



Figure 4. Two out of three erythematous patches, partly eroded with a mild superficial whitish exudate

Case 4

A 39 year-old man was referred to our Institute due to persistent erosions on the prepuce and glans penis, which appeared two weeks before referral. The examination revealed three moist superficial erosions. The largest measured 3 cm in diameter, all covered with whitish exudate, accompanied by bilateral, nontender inguinal lymphadenopathy (Figure 4.). Before referral, the patient was pretreated with a topical antimycotic cream. The lesions were painless, clinically resembling fixed drug reaction; however the patient's history did not indicate any drug intake during the previous month. VDRL titer was 1:2, with TPHA test being positive as well.

Discussion

Genital ulcer disease in male patients can be a sign of a variety of sexually transmitted diseases such as syphilis, chancroid, genital herpes, lymphogranuloma venereum, but may also be a presentation of inflammatory disorders like lichen planus, Reiter's and

Behçet's syndrome, aphthosis, fixed drug eruption, traumatic wounds and even malignancies.

In developing countries, genital ulcer disease is mainly caused by *Haemophilus ducreyi* and *T. pallidum* (2, 3), while in Europe it is usually caused by herpes simplex virus (HSV) infection, predominantly HSV type 2 (4). In developed countries, the leading cause of genital ulcers in heterosexual men and women remains herpes virus infection; however, primary syphilis is the most common cause in the etiology of genital ulcer among MSM (5).

The incidence of early syphilis in Serbia has decreased in the last three decades (6). The exception was the outbreak of syphilis in 2001, which occurred in an institution for health care of adults with mental disorders (7). Chancroid has not been reported since, and the exact prevalence of genital herpes in Serbia remains unknown, since reporting this infection is not mandatory.

Due to low incidence of syphilis, physicians often fail to diagnose it, especially in patients with atypical

clinical presentation. Two of four cases presented in this paper were misdiagnosed and treated as genital herpes or balanoposthitis, while the remaining two cases had a misleading clinical appearance of penile fixed drug eruption and lichen planus like lesions.

In the study of DiCarlo and Martin (1) only 31% of males appeared with the classic syphilitic chancre. It is not infrequent that initial presentation occurs with multiple ulcers resembling genital herpes or chancroid (8). Multiple chancres and other atypical presentations are usually associated with HIV coinfection (9). All cases reported in this paper were HIV negative.

The increasing popularity of oral sex, as a safer sex practice in the HIV era, introduced this type of sexual intercourse as the replacement for higher risk behaviors, especially for MSM population (10). One third of MSM, who were involved in syphilis outbreaks in Brighton and Manchester, United Kingdom, acquired syphilis through oral sex (11). There was also a syphilis outbreak in our Institute from March to June, 2010. Out of the total of 20 diagnosed syphilis cases, 10 were with primary genital syphilis transmitted through insertive oral sex. Multiple genital ulcers were observed in 6 cases, and they may be explained by numerous small penile injuries, from using teeth during oral sex, as sites of *T. pallidum* inoculation.

In all presented cases, serological tests showed lower VDRL titers, already described in primary syphilis (12), and confirmatory TPHA tests, all reactive. Serological test results have limited the sensitivity during the early stage of syphilis, while nontreponemal tests usually become positive 4 to 5 weeks after infection. In our report, the highest titer was in syphilis relapse (VDRL 1:16) which is in agreement with the results of Fiumara (13), who also reported higher titers of antibodies to *T. pallidum* during the relapse.

Complex clinical and serological diagnosis of syphilis and increase in atypical clinical presentations, emphasize the importance of continuous education of non-experienced physicians, especially in countries with lower incidence of syphilis. Lack of proper and early diagnosis of syphilis, apart from the consequences of delayed or inadequate therapy, has a great impact on increased risk for HIV transmission.

Finally, our paper supports the need for education of the sexually active population, especially MSM, about safe sex practice, stressing the fact that unprotected oral sex is a risk factor for various sexually transmitted infections including syphilis and HIV.

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References

1. DiCarlo RP, Martin DH. The clinical diagnosis of genital ulcer disease in men. *Clin Infect Dis* 1997;25:292-8.
2. Behets FM, Andriamiadana J, Randrianasolo D, Randriamanga R, Rasamilalao D, Chan CY, et al. Chancroid, primary syphilis, genital herpes, and lymphogranuloma venereum in Antananarivo, Madagascar. *J Infect Dis* 1999;180:1382-5.
3. Ahmed HJ, Mbwana J, Gunnarsson E, Ahlman K, Guerino C, Svensson LA, et al. Etiology of genital ulcer disease and association with human immunodeficiency virus infection in two Tanzanian cities. *Sex Transm Dis* 2003;30:114-9.
4. Pebody RG, Andrews N, Brown D, Gopal R, De Melker H, François G, et al. The seroepidemiology of herpes simplex virus type 1 and 2 in Europe. *Sex Transm Infect* 2004;80:185-91.
5. Hope-Rapp E, Anyfantakis V, Fouéré S, Bonhomme P, Louison JB, de Marsac TT, et al. Etiology of genital ulcer disease. A prospective study of 278 cases seen in an STD clinic in Paris. *Sex Transm Dis* 2010;37:153-8.
6. Federal Institute of Statistics. Demographic statistics. Belgrade: Federal Institute of Statistics: 1972-2004.
7. Vlajinac H, Sipetic S, Bjekic M, Savcic G, Marinkovic J. Outbreak of early syphilis in an institution for the care of adults with mental disorders. *Epidemiol Infect* 2006;134:585-8.
8. Lacey HB, Higgins SP, Graham D. An outbreak of early syphilis: cases from North Manchester General Hospital. *Sex Transm Infect* 2001;77:311-3.
9. Lynn WA, Lightman S. Syphilis and HIV: a dangerous combination. *Lancet Infect Dis* 2004;4:456-66.
10. Centers for Disease Control and Prevention (CDC). Transmission of primary and secondary syphilis by oral sex – Chicago, Illinois, 1998-2002. *MMWR Morb Mortal Wkly Rep* 2004;53: 966-8.
11. Communicable Disease Surveillance Centre. Increased transmission of syphilis in Brighton and Greater Manchester among men who have sex with men. *Commun Dis Rep CDR Wkly* 2000;10: 386.
12. Anderson J, Mindel A, Tovey SJ, Williams P. Primary and secondary syphilis, 20 years' experience. 3: Diagnosis, treatment and follow up. *Genitourin Med* 1989;65: 239-43.
13. Fiumara NJ. Reinfection primary, secondary, and latent syphilis: the serologic response after treatment. *Sex Transm Dis* 1980;7: 111-5.

Atipična prezentacija primarnog genitalnog sifilisa kod HIV-negativnih seksualno aktivnih homoseksualca: serija prikaza

Sažetak

Serija prikaza: Prikazujemo četiri HIV-negativna pacijenta sa primarnim genitalnim sifilisom koji su infekciju dobili nakon nezaštićenog insertivnog oralnog seksa sa nepoznatim muškim osobama. Lezije na penisu su imale atipičnu prezentaciju i podsećale na herpes genitalis, balanitis, lichen planus i erytema fixum.

Diskusija: O sifilisu bi trebalo razmišljati u diferencijalnoj dijagnozi kako polnih bolesti, tako i drugih dermatoza genitalne regije.

Zaključak: S obzirom na sve češće atipično ispoljavanje sifilisa, potrebno je češće uraditi i serološke reakcije na sifilis.

Ključne reči

Sifilis; Serodijagnoza sifilisa; Bolesti penisa; Seksualno ponašanje; Muška homoseksualnost

Cutaneous Blastomycosis – a case report

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Abstract

We present a 46-year-old non-atopic HIV-negative woman from Doboj, Republic of Srpska, Bosnia and Herzegovina, who was referred to the Department of Dermatovenereology, Clinical Center Banja Luka, Republic of Srpska, Bosnia and Herzegovina, with a 3-month long history of an erythematous, large indurated inflamed area on the upper arm. The condition was asymptomatic, immediately following surgical excision of a small tumor. After exclusion of pulmonary blastomycosis and other organ involvement, the diagnosis of primary inoculation cutaneous blastomycosis was made based on clinical presentation and histopathological findings. Histopathology revealed thick-walled, rounded, budding yeasts with broad-based buds that stained pink with periodic acid-schiff (PAS) staining. Itraconazole therapy was initiated at a dose of 2x100 mg/day. After three months of therapy, the dose of itraconazole was increased to 2x200 mg/day during the next three months, and then the dose was reduced to 2x100 mg. Blastomycosis is an uncommon, chronic granulomatous and suppurative mycosis caused by *Blastomyces dermatitidis*, which belongs to the group of main endemic systemic mycoses and in the great majority of cases represents a primary pulmonary disease. Few sporadic cases have been reported in Europe. There are three forms of blastomycosis: primary cutaneous, pulmonary and disseminated. *B. dermatitidis* has rarely been isolated from the environment. Wood debris or land close to rivers or subject to flooding are considered to be the natural substrate. The fungus can grow in sterile soil in the laboratory, and it is believed that humans get infected by inhaling spores from a saprophytic source. Primary cutaneous blastomycosis is very rare and it is found in farmers and laboratory workers. Human to human transmission does not normally occur. The diagnosis of the skin lesions is made by direct microscopy of skin samples (e.g., pus, scrapings) with 10% potassium hydroxide mount and confirmed by culture or biopsy. Histopathological analysis provides identification of all the dimorphic fungi. However, this can be complicated by the fact that in some cases they can be morphologically atypical or sterile. In the tissues, *B. dermatitidis* produces characteristic thick-walled, rounded, refractile, and spherical budding yeasts with broad-based buds. Of the available antimycotic drugs, itraconazole 200 mg/day is probably the most effective, but at least 400 mg/day is recommended initially.

Key words

Blastomycosis; Dermatomycoses; Treatment Outcome; Disease Progression; Itraconazole

Blastomycosis is an uncommon, chronic granulomatous and suppurative mycosis caused by *Blastomyces dermatitidis*, which belongs to the group of main endemic systemic mycoses and in the great majority of cases represents a primary pulmonary disease (1). The condition was originally thought to be restricted to the North American continent with sporadic cases in Mexico and Central America.

However, it is now known to be widely distributed in Africa. Few sporadic cases have been reported in Europe. There are three forms of blastomycosis: primary cutaneous, pulmonary and disseminated. *B. dermatitidis* has rarely been isolated from the environment. Wood debris or land close to rivers or subject to flooding are considered to be the natural substrate. The fungus can grow in sterile soil in the

laboratory, and it is believed that humans get infected by inhaling spores from a saprophytic source. Primary cutaneous blastomycosis is very rare and it mostly occurs as a laboratory or autopsy infection, but it may occur following traumatic inoculation of the fungus into the skin. Primary cutaneous blastomycosis is found in farmers and laboratory workers. Human to human transmission does not normally occur. The fungus has also been recovered from domestic animals (e.g. dogs). Blastomycosis is a common infection among dogs in endemic areas. It may aid as an indicator of human disease in the shared environment (2). **Blastomyces dermatitidis** is a dimorphic fungus with two distinct forms, yeast and mycelial forms, which often correspond to saprophytic and parasitic phases, respectively. Conidia (spores) that convert to yeast are infectious to humans. The disease may affect people with weakened immune systems, such as those with human immunodeficiency virus (HIV) infection or who have had an organ transplantation, thus the course and prognosis are determined by the immunological response of patients. Men are more likely to be affected than women, but recent series have shown no specific -sex, -age, -race, -occupational predilection or seasonal variation. The incubation period is 1-3 weeks (3, 4).

The clinical spectrum of blastomycosis is varied, including asymptomatic infection, acute or chronic pneumonia, and extrapulmonary disease. If the infection spreads from the chest, lesions develop in many organs, most commonly in the skin, bones and central nervous system. Mucous membranes are rarely involved. Pulmonary lesions are usually asymptomatic, but they may be associated with fever, chest pain, cough and hemoptysis similar to pulmonary tuberculosis. Pulmonary lesions may resolve spontaneously, but they may also result in cavity formation with lung abscess. In most cases, other organs are also affected. Bone lesions are consistent with osteomyelitis. Lesions of the genital system are more common in males (5). If untreated, the disease frequently disseminates and often progresses to death.

In primary skin blastomycosis, after inoculation, an erythematous, indurated plaque, with firm border ulcerations and associated regional lymphangitis and lymphadenopathy usually appears in 1-2 weeks.

The condition shows a strong tendency towards spontaneous recovery. (6). When the infection spreads from the chest, one or many skin lesions may be present as papule or nodule that may ulcerate and discharge pus. These show a tendency for central scarring, they become serpiginous, with raised and warty borders and miliary abscesses containing yeast. Some patients may also present with confluent nodules and abscesses. The diagnosis of the skin lesions is made by direct microscopy of skin samples (e.g., pus, scrapings) with 10% potassium hydroxide mount and confirmed by culture or biopsy. Tissue biopsy of the skin or other organs may be required in order to diagnose extra-pulmonary disease. The best way to diagnose the infection is to perform a fungal culture (7). Histopathological analysis provides identification of all the dimorphic fungi. However, this can be complicated by the fact that in some cases they can be morphologically atypical or sterile (8). In the tissues, *B. dermatitidis* produces characteristic thick-walled, rounded, refractile, and spherical budding yeasts with broad-based buds. On histology, skin lesions associated with bloodstream dissemination, may show pseudoepitheliomatous epidermal hyperplasia, intra- and subepidermal polymorphonuclear abscesses, and granulomatous infiltrates with Langhans giant cells, which may contain round or oval organisms in the dermis. Non-specific granulomatous infiltrates - abscesses may also be seen (9). The laboratory features are non-specific, but may include raised erythrocyte sedimentation rate, leukocytosis, anemia, hyperglobulinemia and a raised IgE level [10].

Differential diagnosis includes: tuberculosis, leprosy, gangrenous pyoderma, other deep mycoses, squamous cell carcinoma, drug reactions resulting from bromoderma and iododerma. Of the available antimycotic drugs, itraconazole 200 mg/day is probably the most effective, but at least 400 mg/day is recommended initially (10). Ketoconazole 400-600 mg/day, is an alternative therapy, while amphotericin B, 15-30 mg/day, during 10 weeks, should be used in the treatment of disseminated forms of blastomycosis (11). If untreated, the disease takes a chronic course with remissions and exacerbations. Modern treatment is effective, providing a more favourable prognosis of the disease (12).

Case report

We present a 46-year-old, non-atopic HIV-negative woman from Doboj, Republic of Srpska, Bosnia and Herzegovina, who was referred to the Department of Dermatovenereology, Clinical Center Banja Luka, Republic of Srpska, Bosnia and Herzegovina, with a 3-month history of an erythematous, large indurated inflamed area on the upper arm. The condition was asymptomatic, immediately following surgical excision of a small tumor in June 2011. According to anamnestic data, the patient had a small, solid brownish skin papule, the size of a grain of rice on the upper left arm. The lesion was at least 20 years old, but suddenly and unexpectedly, itchy redness appeared around the tumor and surgical excision was recommended. The histological finding revealed acanthosis and papillomatosis of the epidermis and inflammatory changes in the subepidermal stroma. Histological diagnosis was inflamed dermal papillae. After surgical excision, wound was impaired and it became inflamed. A few days later, the patient developed a fever, irritability and skin tenderness. *Staphylococcus aureus* was recovered from the lesion, but direct mycological examination and mycological cultures were negative. From June to August 2011, the patient was treated in Doboj with systemic antibiotics, local antibiotics and antiseptics. Due to persistence and spreading of inflammation, the patient was referred to our institution. On admission, the patient presented with a large, soft, fluctuating, erythematous, infiltrated plaque with a granular, wet surface and periferal satellite papules that accumulated into large, spreading nodules.

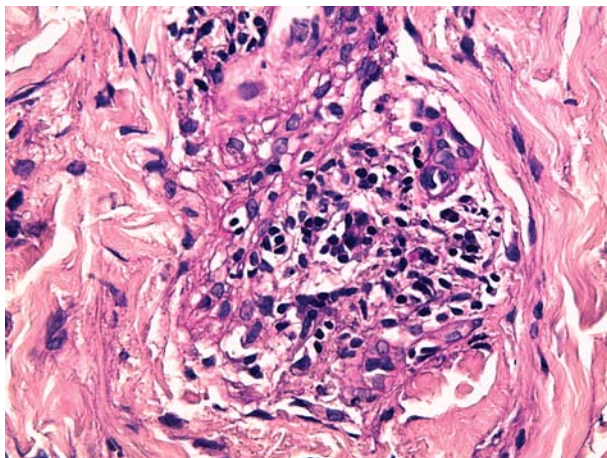


Figure 1. Abscess-like formation with plenty of eosinophils and neutrophils (PAS x 200)

Bacteriological examination: routine wound swabs taken for bacteriological culture were all sterile.

Direct mycological examination of skin samples and sputum in potassium hydroxide mounts and repeated cultures including for *Candida* were negative.

Baseline laboratory studies included complete blood count, erythrocyte sedimentation rate, urinalysis, C-reactive protein, fibrinogen, aspartate aminotransferase, alanine aminotransferase, lactate dehydrogenase, gamma-glutamyl transpeptidase, serum protein electrophoresis, serum electrolytes, glucose, blood urea nitrogen and creatinine, serum immunoglobulins which were within normal limits except for elevated total serum cholesterol 7.9 mmol/l (normally).

Other relevant findings, such as ultrasound of the upper abdomen and armpits, chest X-ray, and X-ray of the left upper arm were normal.

Histological finding of the first skin biopsy taken in August 2011 revealed a moderate epidermal hyperkeratosis, pronounced acanthosis and exocytosis of neutrophils and eosinophils in the overlying epidermis. The dermis layer was edematous, with papillary dermal vessels showing ectasia, mixed inflammatory cell perivascular infiltrates with prominent number of eosinophils, neutrophils and polymorphonuclear abscess like formations (Figure 1). Occasionally, there were areas of collagen degeneration with some eosinophils present between collagen fibres. Periodic acid–Schiff staining (PAS) demonstrated focal presence of broad-based budding yeasts, staining pink, appearance typical for *B. dermatitidis* in skin biopsies (Figures 2 and 3).

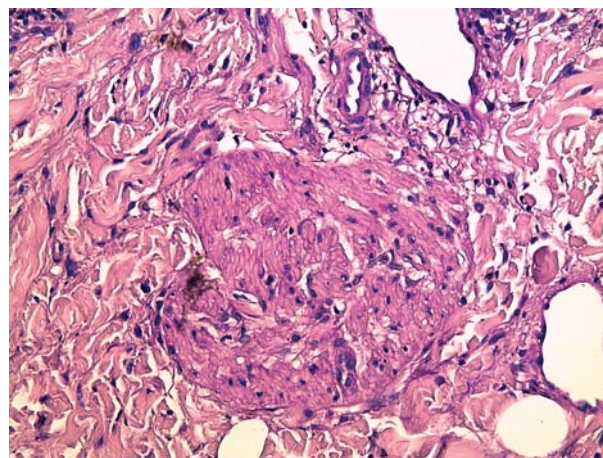


Figure 2. Dermal granuloma: focal presence of budding yeasts in the dermis (PAS x 200)

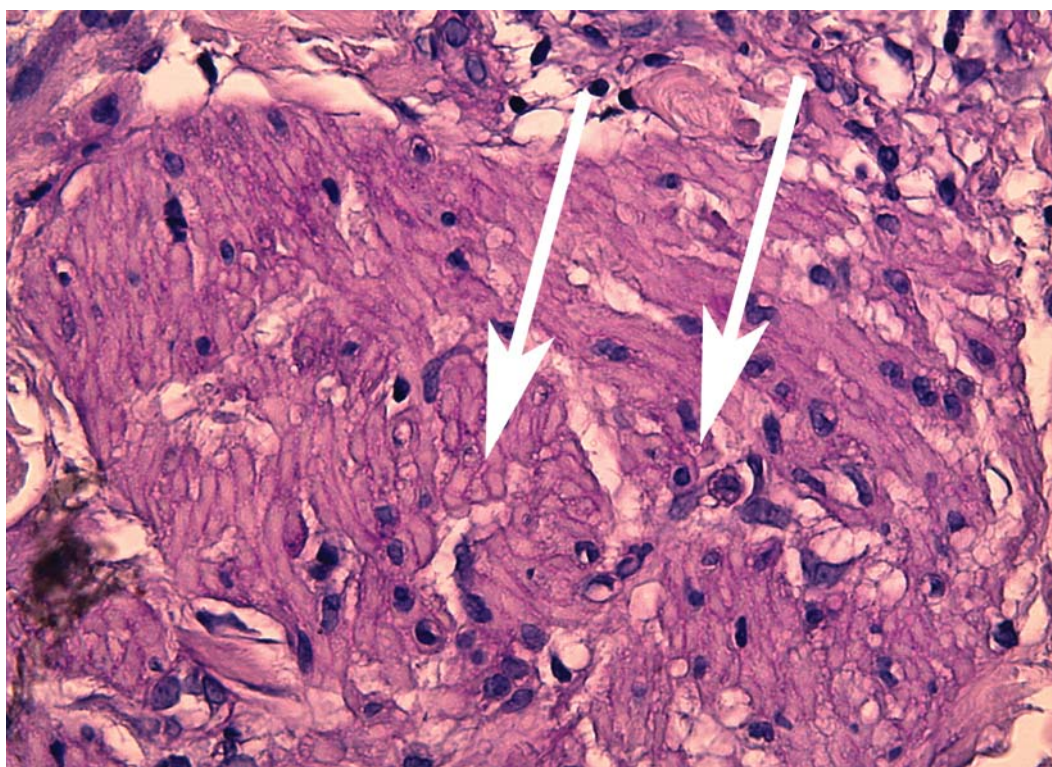


Figure 3. High power view of *Blastomyces dermatitidis* yeast inside and outside the giant cells (indicated by an arrows) (PAS x 400)



Figure 4. Skin lesion after three months of therapy



Figure 5. Skin lesion after four months of therapy



Figure 6. Disseminated skin lesions



Figure 7. Disseminated small papules



Figure 8. Skin lesion (lateral aspect of the arm) after ten months of therapy



Figure 9. Skin lesion (antero-lateral aspect of the arm) after ten months of therapy

Itraconazole therapy was initiated with at a dose of 2x100 mg/day. After three months of therapy, due to poor therapeutic response (Figure 4) the skin biopsy was repeated and once again, the histological finding revealed thick-walled, rounded, budding cells with broad-based buds that stained pink with PAS. We consulted our colleagues from the Clinic of Dermatology, Military Medical Academy in Belgrade, and the dose of itraconazole was increased to 2x200 mg/day during the next three months (Figure 5). In this period, the patient exhibited papules and itching papulopustules disseminated over the upper limbs and trunk, which were recognized as "id" reaction (Figures 6 and 7), and short-term therapy with low-dose methylprednisolone was temporarily administrated. After the treatment, there was a complete regression of skin lesions on the trunk. After seven months of itraconazole therapy, the itraconazole dose was reduced to 2x100 mg. The last examination in our hospital was done ten months after the initiation of itraconazole. Further improvement was established (Figures 8 and 9). All control laboratory tests performed monthly were normal. The next examination was scheduled for September 2012.

Discussion

After exclusion of pulmonary blastomycosis and other organ involvement, the diagnosis of primary inoculation cutaneous blastomycosis was made based on clinical presentation and histopathology finding. The finding of broad-based budding yeast inside and outside the giant cells was very important for making the diagnosis of blastomycosis. Similarly to our case, blastomycosis presenting as a nonhealing wound was reported by Owen et al. (13). Primary cutaneous blastomycosis is very rare. Several case studies have reported on direct cutaneous inoculation of blastomycosis, although in the case reported by Gray NA and Baddour LM, the patient was inoculated after being struck by a projectile while performing yard work (14). The incidence of infections tends to be highest in rural areas and in agricultural workers (8). The diagnosis is confirmed by culture or biopsy (8). Our patient lives in a rural area and the diagnosis was established by identifying the characteristic broad-based bud yeast in the tissue. Itraconazole was introduced because it appeared to be effective in most cases and it can be taken orally (8).

Blastomycosis is an endemic mycosis that occurs predominantly in North America, North-Central United States and provinces of Canada. The greatest number of cases is recorded in the Mississippi Valley (15). One retrospective analysis, reviewed records of 123 patients treated for blastomycosis at the University of Mississippi Medical Center from January 1980 through May 2000. There were 87% of patients with pulmonary, 20% with cutaneous, 15% with bone, and 3% with CNS involvement. Proportionally to the pattern of patients admitted to the University of Mississippi Medical Center, there was a clear predominance of black males among patients with blastomycosis, followed by black females. White females constitute the sex/ethnic group least affected by this fungal disease (16). During January through March 2006, twenty-one laboratory confirmed cases of blastomycosis were reported among residents of an endemic area in North-Central Wisconsin; a striking increase compared to previous years. Epidemiologic features, signs and symptoms of *Blastomyces dermatitidis* infection were analyzed among 46 reported (1999-2005) and 21 possible outbreak case. Results of this investigation of a large non-rural outbreak of blastomycosis suggest that bioaerosol hazards may exist near yard waste collections and composting facilities, especially where pine tree litter is present, in *Blastomyces dermatitidis* endemic areas (17). Blastomycosis is also endemic in some parts of Africa. Clinical differences between the African and North American isolates were noted. The African isolate presents with different types of skin lesions, less frequently involves the central nervous system and more frequently involves bones (18). The known African cases of blastomycosis are presented from 1987, including thirteen previously undescribed cases. This brings to a total number 81 of cases known to have occurred in Africa (18). The question whether the disease in Africa is the same in all respects as that in North America stands; the age and sex distribution of patients is similar. Minor differences in the clinical features relate particularly to the type of skin lesions; bone involvement is more frequent, and central nervous system involvement is less frequent in African patients (19). The disease is very rare in China and also commonly misdiagnosed, often as cancer or other infectious disease (20).

The prevalence of the disease among children in endemic regions ranges from 2-11%, and it is extremely rare in children under one year of age (21). Updated guidelines by the Infectious Diseases Society of America are available to aid clinicians in the management of various forms of blastomycosis (22).

Blastomycosis has a significant morbidity and mortality, and in unsuspected atypical, or asymptomatic cases, the skin lesions may be the key to successful diagnosis and treatment (23).

Although uncommonly diagnosed, it is an important fungal infection in the South-Central and Midwestern United States. In endemic areas, blastomycosis appears in the differential diagnosis of many inflammatory systemic diseases, particularly pulmonary, post-traumatic skin, soft-tissue, bone or central nervous system infections (18,19).

Conclusion

Blastomycosis is rarely encountered in Europe (24). Within the last twenty years, we have identified only one case of blastomycosis, despite a large number of patients referred to our institution. The diagnosis, however, was not confirmed by culture. The difficulty of isolating *Blastomyces dermatitidis* from skin lesions has already been reported (24).

References:

1. Chapman SW, Dismukes WE, Proia LA, Bradsher RW, Pappas PG, Threlkeld MG, et al. Clinical practice guidelines for the management of blastomycosis: 2008 Update by the Infectious Diseases Society of America. Clin Infect Dis 2012;45(12):1801-12.
2. Savio J, Muralidharan S, Macaden RS, D'Souza G, Mysore S, Ramachandran P, et al. Blastomycosis in a South Indian patient after visiting an endemic area in USA. Med Mycol 2006;44(6):523-9.
3. Chapman SW, Bradsher RW, Campbell GD, Pappas PG, Kauffman CA. Practice guidelines for the management of patients with blastomycosis. Infectious Diseases Society of America. Clin Infect Dis 2000;30(4):679-83.
4. Pappas PG. Blastomycosis in the immunocompromised patient. Semin Respir Infect 1997;12(3):243-51.
5. Moris SK, Brophy J, Richardson SE, Summerbell R, Parkin PC, Jamieson F, et al. Blastomycosis in Ontario, 1994-2003. Emerg Infect Dis 2006;12:274-9.
6. Gray NA, Baddour LM. Cutaneous inoculation blastomycosis. Clin Infect Dis 2002;34:44-9.
7. Cecchi R, Bartoli L, Brunetti L, Pavesi M. Blastomycosis-like pyoderma in association with recurrent vesicular hand eczema: Good response to acitretin. Dermatol Online J 2011;17(3):9.
8. 10. Hay RJ, Ashbee HR. Mycology. In: Rook's Textbook of Dermatology. 6th ed. Tony Burns, Stephen Breathnach, Neil Cox, Christopher Griffiths

eds. Oxford: Blackwell Publishing Ltd; 2010. pp. 36.1-92.

9. Lester RS, DeKoven JG, Kane J, Simor AE, Krajden S, Summerbell RC. Novel cases of blastomycosis acquired in Toronto, Ontario. *CMAJ* 2000;163:1309-12.

10. Cerullo L, Zussman J, Young L. An unusual presentation of blastomycosis like pyoderma (pyoderma vegetans) and a review of the literature. *Cutis* 2009;84(4):201-3.

11. McKinnell JA, Pappas PG. Blastomycosis: new insights into diagnosis, prevention, and treatment. *Clin Chest Med* 2009;30:227-39.

12. Finn MJ, Stiles J, Krohne SG. Visual outcome in a group of dogs with ocular blastomycosis treated with systemic antifungals and systemic corticosteroids. *Vet Ophthalmol* 2007;10(5):299-303.

13. Owen WR, Thurs K, Kim DS. Blastomycosis presenting as a nonhealing wound. *Adv Skin Wound Care* 2012;25(7):321-3.

14. Gray NA, Baddour LM. Cutaneous inoculation blastomycosis. *Clin Infect Dis* 2002;34:44-9.

15. Bradsher RW, Chapman SW, Pappas PG. Blastomycosis. *Infect Dis Clin North Am* 2003;17:21-40.

16. Lemos LB, Guo M, Baliga M. Blastomycosis: organ involvement and etiologic diagnosis. A review of 123 patients from Mississippi. *Ann Diagn Pathol* 2000;4(6):391-406.

17. Pfister JR, Archer JR, Hersil S, Boers T, Reed KD, Meece JK

et al. Non-rural point source blastomycosis outbreak near a yard waste collection site. *Clin Med Res* 2011;9(2):57-8.

18. Carman WF, Frean JA, Crewe-Brown HH, Culligan GA, Young CN. Blastomycosis in Africa. A review of known cases diagnosed between 1951 and 1987. *Mycopathologia* 1989;107:25-32.

19. Bariola JR, Perry P, Pappas PG, Proia L, Shealey W, Wright PW, et al. Blastomycosis of the central nervous system: a multicenter review of diagnosis and treatment in the modern era. *Clin Infect Dis* 2010;50(6):797-804.

20. Zhao TM, Gao J, She DY, Chen LA. Blastomycosis in China: a case report and literature review. *Chin Med J* 2011;124(24):4368-71.

21. Walsh CM, Morris SK, Brophy JC, Hiraki LT, Richardson SE, Allen UD. Disseminated blastomycosis in an infant. *Pediatr Infect Dis J* 2006;25(7):656-8.

22. Smith JA, Kauffman CA. Blastomycosis. *Proc Am Thorac Soc* 2010;7(3):173-7.

23. Dhamia A, D'Souza P, Salgia P, Meherda A, Kothiwala R. Blastomycosis presenting as solitary nodule: A rare presentation. *Ind J Dermatol* 2012;57(2):133-5.

24. Chodorowska G, Leciewicz-Torun B. Long-term observation of a case of cutaneous blastomycosis in Poland treated with fluconazole. *Mycoses*. 1996; 39:283-7

Blastomikoza kože - prikaz slučaja

Sažetak

Uvod: Blastomikoza je retka hronična granulomatozna supurativna sistemska mikoza koju izaziva *Blastomyces dermatididis* i koja se u najvećem broju slučajeva manifestuje kao primarno oboljenje pluća. Primarna blastomikoza kože je retka i uglavnom se javlja kao infekcija u laboratoriji, obdukcijskoj sali, ili posttraumatski. Kada se javlja kod osoba sa oslabljenim imunitetom kao što su inficirani virusom humane imunodeficijencije (eng. *Human immunodeficiency virus* – HIV) ili nakon transplantacije organa, može se smatrati oportunističkom infekcijom. Period inkubacije je od jedne do tri nedjelje. Kožne lezije su obično asimptomatske; mogu se javiti u širokom spektru kliničkih varijacija u vidu: hiperkeratotičnih nodula, vegetantnih plakova, ulceracija sa manjim pustulama na marginama, vezikulopustuloznom ili nodularnom obliku. Dijagnoza se postavlja na osnovu patohistološkog nalaza i identifikacije uzročnika kulturom. Bolest se u Evropi javlja retko: uglavnom u vidu sporadičnih slučajeva; češća je u nekim delovima Severne Amerike i Kanade.

Prikaz slučaja: Prikazujemo bolesnicu starosnog doba 46 godina, iz Doboja, sa blastomikozom kože na levoj

nadlaktici koja se javila neposredno nakon hirurške ekscizije izrasline na koži u junu mesecu 2011. godine. Tumor veličine zrna pirinča, lokalizovan na sredini nadlaktice pacijentkinja je imala prethodnih 20 godina, a hirurška ekscizija je preporučena zbog crvenila i svraba kože u okolini tumora. U patohistološkom nalazu ekscidirane promene opisuje se papilomatozna promena sa akantozom, papilomatozom epiderma i zapaljenskim promenama subepidermalne strome... dijagnoza: *papilloma cutis inflamatum*.

Rana nakon hirurške ekscizije nije zacelila već se inflamirala i širila uz pojavu povišene temperature koju je pacijentkinja imala pet dana. U brisu uzetom sa kožne promene izolovan je *Staphylococcus aureus*. Kultura brisa na kvasnice je bila negativna. Od juna do avgusta meseca 2011. godine pacijentkinja je lečena u nadležnim ustanovama u Doboju sistemskim antibioticima, lokalnim antibioticima, antisepticima. Zbog perzistiranja i širenja inflamacije na ruci upućena je u našu ustanovu. Pri prvom pregledu u našoj klinici (avgust 2011. godine) registrovan je: opsežan meki, fluktuirajući, eritematozni, infiltrirani plak, granulozne, izrazito secernirajuće, vlažne

površine uz salelitske noduse po periferiji. U brisu uzetom sa promene nisu nađene patogene bakterije; mikološkim mikroskopskim pregledom nativnog preparata i kulture u brisu promene na koži i sputumu nisu nađeni gljivični elementi.

Patohistološki pregled: U patohistološkoj analizi isečka uzetog sa promenjene kože, rađenoj avgusta 2011. godine, epidermis je akantotičan i pokazuje izraženu hiperplaziju; na površini epidermisa nalazi se umereno deo sloj hiperkeratoze, a na više mesta duž epidermisa upalni infiltrat građen od neutrofilnih i eozinofilnih granulocita koji se širi između samih epitelnih ćelija; dermis je edematozan, sa edematoznim i dilatiranim dermalnim papilama koje sadrže dilatirane i krvlju prepunjene krvne sudove, te perivaskularne infiltrate građene od mešoviti zapaljenskih ćelija u kojima osim limfocita dominiraju neutrofilni i eozinofilni granulociti; mestimično je prisutna degeneracija kolagenih vlakana između kojih se nalazi mnoštvo eozinofilnih granulocita; postoji i izvestan broj histiocita sa fagocitovanim hemosiderinskim pigmentom; na pojedinim mestima fokusi zapaljenja grade apscesoidne strukture. Specijalnim *periodic acid-schiff* (PAS) bojenjem, na više mesta na površini epidermisa kao i fokalno na rubovima dermisa uočavaju se široke spore karakteristične za blastomikozu.

Svi rezultati laboratorijskih i ostalih relevantnih analiza bili su u granicama fizioloških vrednosti: kompletna krvna slika, osnovne biohemijske analize, antiabdomena i obe aksile, rendgenski snimak pluća i leve nadlaktice.

Dijagnoza: Nakon isključenja zahvatanja pluća i ostalih

organa, dijagnoza blastomikoza kože postavljena je na osnovu anamneze, kliničke slike i patohistološkog nalaza. Lečenje: U terapiju je uključen itrakonazol u dnevnoj dozi od 2 x 100 mg tokom 3 meseca. Zbog slabog terapijskog odovora, ponovljena je biopsija kože: nalaz koji je identičan sa analizom prvobitno uzetog bioptata. Posle konsultacije sa kolegama dermatolozima sa Vojnomedicinske akademije (VMA) u Beogradu, dnevna doza itrakonazola povećana je na 2 x 200 mg naredna tri meseca. U tom periodu, kod pacijentkinje su se, osim promene na ruci, po koži trupa i ekstremiteta, javile diseminovane papule i papulopustule uz osećaj svraba koji su shvaćeni kao „*id*“ reakcija; u terapiju je uključen sistemski kortikosteroid (metiprednizolon) u tri navrata u kratkom vremenskom periodu. Nakon ove terapije, smanjuju se infiltracija, vlaženje promene na ruci i dolazi do regresije kožnih promena po trupu. Nakon sedam meseci, dnevna doza itrakonazola je smanjena na 2 x 100 mg. Poslednji put je pregledana u našoj ustanovi, deset meseci nakon uvođenja itrakonazola u terapiju, kada je i registrovana regresija promene na ruci uz perzistiranje postinflamatornog eritema. Svakog meseca su rađene kontrolne laboratorijske analize koje su bile u granicama referentnih vrednosti: kompletna krvna slika i osnovni biohemijski parametri. Prekid davanja itrakonazola uslediće nakon dvanaest meseci od započinjanja lečenja.

Zaključak: Blastomikoza kože je retko oboljenje u Evropi; javlja se u vidu brojnih kliničkih varijeteta; leči se antifungalnim imidazolskim preparatima; lečenje traje i do 12 meseci.

Ključne reči

Blastomikoza; Dermatomikoze; Ishod lečenja; Tok bolesti; Itrakonazol

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Epidermalne promene (npr. površinske rane, ogrebotine, ubodi insekata, opekotine od sunca, nadraženosť posle brijanja)

Protokol:

52 male dece, starosti 4-34 meseca, sa suvom i osetljivom kožom sa umerenim iritacijama kože.
Nanošenje na lice (uključujući usne) ili telo najmanje 2 puta dnevno tokom 4 nedelje.

bez mirisa
bez parabena
bez lanolina
hipoalergen
**formula prilagođena
i bebama**

La Roche-Posay. Posvećen dermatologiji.

The 2nd Congress of the Pan-Slavic Association of Dermatovenereologists, Belgrade 1931

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Abstract

The Pan-Slavic Association of Dermatovenereologists (PSADVs) was founded in May 1928, and it included dermatologic associations of Bulgaria, Czechoslovakia, Poland and Yugoslavia. Its president was Prof. Krzyształowicz from Poland. The 1st Congress of this association was held in Warsaw in 1929, and the 2nd Congress was organized by the Association of Dermatovenereologists of Yugoslavia (ADVY), in Belgrade in 1931. The president of the Organizing Committee was Prof. Ćorđe Ćorđević, and the secretary Assoc. Prof. Milan Kićevac from the Clinic of Dermatovenereology in Belgrade. The Congress was attended by representatives of Slavic national associations, as well as by representatives of French, Romanian, Greek and Turkish dermatology. The number of participants amounted to 160 physicians and 60 members of their families.

According to the report of Ilić S., 104 papers had been presented: 48 from Yugoslavia (37 from Serbia, 3 from Croatia, 3 from Macedonia, and 5 from Bosnia), 23 from Czechoslovakia, 18 from Poland, 8 from France, 5 from Romania, 1 from Turkey, and 1 from Greece.

Most papers were from the area of sexually transmitted diseases: 43 papers (41.35% of the total number). Out of these, 27 papers were on syphilis, followed by gonorrhea with 9 papers. There were both research and experimental papers. The authors insisted on assessing diagnostic and therapeutic issues, as well as disease prevention.

The second most frequent group of diseases accounted for eczema. The problem included the definition and pathogenesis of the disease.

The third group of diseases was tuberculosis. The results of experiments on animals were studied pointing out the need for reclassification of skin tuberculosis in relation to internal tuberculosis.

A small number of papers were on other infections of the skin and genitals, as well as individual cases of various dermatoses.

During the Congress, social events were also organized, as well as a banquet on the ship Alexander I cruising on the Danube and Sava. Optional travel tours to all parts of Yugoslavia were also offered.

Soon after the Congress, foreign journals published reports on its high professional level and the entire organization.

Key words

Congresses; Dermatology; Venereology; History of Medicine; Serbia

The third decade of the twentieth century was one of the most important periods in the history of dermatovenereology in Serbia. In this short period of time (1922 – 1930), all significant institutions important for the professional and scientific

development of this discipline were formed (1): Association of Dermatovenereologists of Yugoslavia (ADVY), was founded in 1927 and included all dermatovenereology sections of the Kingdom of Serbs, Croats and Slovenes, facilitating their inclusion into

the Pan-Slavic Association of Dermatovenereologists (PSADVs) in 1928 (2).

The idea of founding the PSADVs was proposed by Prof. Krzysztalowicz (1868 – 1931) from Warsaw and Prof. Schamberger (1871 – 1944) from Prague in 1927, in order to unite the Slavic dermatologists on professional level. The Organizing Committee was formed at the Clinic in Warsaw, and Prof. Krzysztalowicz was appointed as president. The PSADVs was founded in May 1928 in Prague, during the *Slavic Congress of Medical Practitioners*, yet another Pan-Slavic Medical Association (3). At that time, the PSADVs included four national associations: Bulgarian, Czechoslovakian, Polish and Yugoslav (4), and its first president was Prof. Krzysztalowicz, a renowned dermatologist and a member of the highest dermatological organization “Council of Seven”. The 1st Congress of the PSADVs was held in Warsaw in 1929 (3).

One of the conclusions made at the *Slavic Congress of Medical Practitioners* held in Split in 1930, was that the future specialist associations would not work individually, but enter into sections of the *Slavic Association of Medical Practitioners* and organize their congresses in its framework (5). However, despite this decision, the PSADVs continued to organize its congresses as independent specialist events.

After the 1st Congress of the PSADVs, its leadership was transferred to the ADVY, based in Belgrade. The president of the Association was Prof. Đorđević Đ. (Belgrade), and Assist. Prof. Kićevac M. (Belgrade) was its secretary (4). Thus, the 2nd Congress of the PSADVs was held in Belgrade in June 1931 (4), while the 3rd Congress of the PSADVs was organized in Prague in 1934 under the direction of Prof. Schamberger (6).

There are no further information on the work of this Association. The only things found related to it were recollections about the PSADVs of Prof. Zahejski and Prof. Glinski, on the occasion of the foundation of the *Central East European Dermatovenereological Association* (7). However, it is possible that archives of other Slavic dermatological associations possess some other information.

As mentioned before, the 2nd Congress of the PSADVs was held in Belgrade, 27–29 June, 1931. The Organizing Committee consisted of: Prof. Đorđević Đ, the president, Assist. Prof. Kićevac M., the secretary, and members: “all renowned dermatologists of the ADVY” (4).

Considering the lack of Congress program, contents, proceedings and book of abstracts, our further report will follow a very detailed outline about its organization and activities, and abstracts, which have a value of a book of abstracts, and which were published in the journal *Medical Review* by Dr. Ilić S., later the director of the Clinic of Dermatovenereology in Belgrade (4,8-13). This journal of general medical interest was also in the scope of Pan-Slavic events, and was a mutual publication of Belgrade, Zagreb, Ljubljana and Sofia. Its founders were distinguished physicians from medical centers of abovementioned towns, and their names are listed below the journal title. An important source of information regarding paper content was a very valuable collection of 57 original papers (hand- or typewritten) submitted to the 2nd Congress of the PSADVs, still kept in the archives of the *Clinic of Dermatovenereology* in Belgrade (14). Apart from this, eight papers of Yugoslav authors, who presented their papers at the Congress and published them in extenso in *Medical Review*, will also be used (15).

The Congress was attended by representatives of Slavic national associations, as well as by eminent representatives of French, Romanian, Greek and Turkish dermatology. It was organized under the auspices of His Majesty King Alexander I in the premises of the newly built amphitheater of the Institute of Physiology and Histology of the School of Medicine in Belgrade. The official languages were Slavic languages and French. Due to a significant number of participants from non-Slavic countries, one morning session was held in French (4).

The Congress was opened on Saturday, June 27, at 9 o'clock with a formal speech of the president Prof. Đorđević Đ. Welcome speeches were given by Prof. Krzysztalowicz F. (Warsaw), Prof. Schamberger F. (Prague), Prof. Pautrier L. M. (Strasbourg), Prof. Nicolau St. Gh. (Bucharest), Dr. Photinos G. Th. (later a Professor) (Athens), Prof. Antić D. on behalf of the School of Medicine, Prof. Kogoj F. on behalf of the School of Medicine and Society of Physicians in Zagreb, Prof. Zarubin V. on behalf of the Medical Society in Skopje, and Dr. Ivković M. on behalf of the Yugoslav Medical Society. Secretary General, Assist. Prof. Kićevac M. read the greeting telegrams (4).

The total number of participants was 160, and there were 60 members of their families. There were

28 professors among the lecturers, most with the title at the time, or they gained it later: Schamberger F. (Prague), Petrarchek E. (Prague), Prochaska G. (Prague), Hubschmann K. (Prague), Gawalowski K. (Prague), Treger J. (Bratislava), Krzyształowicz F. (Warsaw), Alkiewicz J. (Warsaw), Walter Fr. (Krakow), Karwowski A. Sp. (Poznan), Leszcynski R. (Lwow), Malinowski F. (Wilno), Grzybowski M. (Warsaw), Pautrier L. M. (Strausbourg), Nicolau St.Gh. (Bucharest), Banciu A. (Bucharest), Photinos G. Th. (Athens), Kogoj F. (Zagreb), Thaller L. (Zagreb), Čajkovac Š. (Zagreb), Flegler J. (Sarajevo), Zarubin V. (Skoplje), Todorović K. (Belgrade), Đordjević Đ. (Belgrade), Milošević S. (Belgrade), Kićevac M. (Belgrade), Ilić S. (Belgrade), Damjanović R. (Belgrade) and Primarius Fabian A. The names of most dermatologists from this group will remain permanently part of the scientific development of the profession (16).

According to the report of Ilić S., 104 papers were presented (4): 48 from Yugoslavia (37 from Serbia, 3 from Croatia, 3 from Macedonia, and 5 from Bosnia), 23 from Czechoslovakia, 18 from Poland, 8 from France, 5 from Romania, 1 from Turkey, and 1 from Greece.

Given the number of papers that covered a broad topic area and included a significant number of eminent experts, the Congress was a cross-section through dermatology of that time. Just like in all branches of history, concepts and ideas presented should be considered in the context and knowledge of that time. From this point of view, we highly appreciate the inventiveness, dynamics and the stimulating importance of comprehension and actions of our predecessors, whether they made new discoveries of permanent value, anticipated concepts, or had only speculative, sometimes imprecise, vague or even wrong projects. In our analysis we will pay special attention to those papers that supported progress or an original idea, study, or their analysis, even if they did not withstand the test of time. By doing so, the value of other papers is not disputed, because we believe that nothing goes without a trace. Breakthrough discoveries in science are rare and they are composed of tiny grains of previous findings which remain in their foundations.

Most papers were from the field of sexually transmitted diseases (STD): 43 (41.35% of the total

number). In the pre-antibiotic era, this group of diseases presented both scientifically and medically, the most important dermatological problem worldwide for reasons which were overwhelming: high contagiousness, progressive clinical course with severe consequences, lack of diagnostic procedures with imprecise criteria, and insufficient and often aggressive therapy.

Of all STDs, syphilis was the greatest diagnostic and therapeutic problem and it was the topic of 27 papers, more than half the papers in this group of diseases (62.8%).

Firstly, we will discuss experimental and research papers. *Lenartowicz J.* (Lwow), a distinguished dermatologist, presented the following paper: "A research on experimental syphilis" (12). The author studied the problem of reinfection, superinfection and immunity in 25 patients with syphilis who were intracutaneously inoculated with material taken from rabbits infected with syphilis: inoculation was negative in the secondary stage, while in the third stage of the acquired and hereditary tardive (congenital) syphilis it was positive. Without further result analysis, this paper is important because of its ethical aspects and substantiality it still has (drug testing on humans); at that time this type of experiment was not exceptional. In the same period, in 1932, in Tuskegee, Alabama, USA, the "Tuskegee Syphilis Study" was conducted including 399 patients with syphilis who were left without treatment in order to study the natural course of the disease. In 1972, the Tuskegee study was brought to public and survivors received penicillin (17). "The syphilis experiments in Guatemala" were US-led human experiments conducted in Guatemala from 1946 to 1948 when subjects were "voluntarily" infected with syphilis, gonorrhea and chancroid in order to study prophylaxis of these diseases. Much later, both projects received adequate publicity and attracted government attention and reaction (18).

The paper of *Ilić S.* was about immunity in syphilis which was based on extensive literature data and clinical experience. He presented his view that there was no "real immunity" in syphilis (after the healing process), but only "infectious immunity" (15).

In his Congress report, *Photinos G. Th.* (Athens) presented results of his experiments on animals showing that after inoculation *Treponema* reached

the lymph nodes of animals after five hours, and the whole body after 5 days (12).

De Mienick M. (Wilno) (12) reported about testing blood coagulation in 204 patients with syphilis. He established that the coagulation rate decreased from the I to the end of the III stage of syphilis, whereas in the IV stage ("metasyphilis" – syphilis of the central nervous system) blood coagulation considerably accelerated. These results may be discussed in relation to later interpretations of nonspecific syphilis serology tests.

Serological diagnosis of syphilis was the subject of eight papers that evaluated the sensitivity, diagnostic criteria and technical improvement of these methods for further treatment of patients, particularly in the control of congenital syphilis. *Kogoj F.* (Zagreb) analyzed over 15.000 sera, with about 60.000 reactions: "favorable" reactions were combined *Meinicke* I and *Miller* II, and "WR reaction", although the latter was not considered a standard reaction (19).

Treatment of syphilis was the subject of papers on serological reactions as well as of two papers dealing with various treatment options of that time. The lack of adequate therapy was indicated by different therapeutic modalities and sometimes by different conclusions.

Bugarski S. (Belgrade) reported about iodine injections (Pregl's solution) which was associated with aggravation and provocation of clinical signs of early forms of syphilis, as well as with increased virulence of spirochete taken from these patients and inoculated to rabbits. Based on these findings, it was concluded that iodine preparation destroyed patient's antibodies and enhanced spirochete virulence (20). In contrast, according to the literature, some venereologists favored iodine over arsenic and later penicillin. Even after the First World War, some physicians used a two-year treatment with mercury combined with neoarsphenamine (21). Experience and time were necessary to test and accept new drugs, and it was the case with penicillin. Each new medicine was introduced with hope, but caused concern and caution as well.

Special attention in Congress papers was paid to congenital (3 papers) and endemic syphilis (3 papers). In the diagnosis of congenital syphilis, "luotest" was introduced by *Valentova O.* (Prag), and it was especially important in examining children of parents

suffering from syphilis (12). In the prophylaxis of congenital syphilis, *Kisličenko L.* (Skoplje) pointed to the necessity of antenatal therapy of pregnant women and postnatal therapy of newborns (13). Apart from that, in a group of 5.202 schoolchildren from Bitolj, as reported by *Jurčenko D.* (Macedonia), there were 15.5% of cases with congenital syphilis (13). Reports about *endemic syphilis* were from Slovakia (1 paper by *Hynie J.* – Prague) (13), and 2 papers from Bosnia (*Nešković M.*, *Dojmi L.*) (13). Apart from clinical forms of diseases typical for endemic syphilis, the importance of prophylaxis was pointed out: identification of endemic foci, systematic work, and introduction of vigorous and uniform treatment modalities. In the pre-antibiotic era, effectiveness of treatment and eradication of endemic foci were a major problem.

Three clinical pictures were presented that have not been found in the penicillin era: 1. Syphilitic dry gangrene of the earlobe and toe associated with cold exposure and withdrawal of symptoms after antisiphilic treatment (*Đorić M.* – Belgrade) (11), today it is well known that cryoglobulinemia may affect patients with syphilis (22); 2. Urinary bladder syphilis with syphilitic changes of the skin that were in stages II and III (*Jovanović I.* – Belgrade) (13); 3. Hereby we would like to mention the paper of Dr. *Banciu A.* (Bucharest) who presented a case of a patient with syphilitic macular exanthema, without signs of initial changes, who received hetero-chemotherapy from a seropositive person (11).

At the end, papers on syphilis were completed by those on the history of syphilis: *History of the disease Škrljevo* (*Thaller L.* – Zagreb), and *History of syphilis in Serbia* (*Mihajlović V.* – Belgrade) (13). Both papers were about syphilis at the beginning of the 19th century, whereas twenty years later ("the incubation period") it acquired characteristics of an endemic disease.

Gonorrhea: There were 9 papers on gonorrhea.

Sawicki and *Fedosewicz S.* (Wilno) reported about 300 patients with gonorrhea. They found that gonococci were detectable in the first days of the disease, while in the 3rd week the percentage of positive cultures decreased (13).

Kutka V. (Bratislava) presented his results, since he found that seroreaction to gonococci was negative

at the beginning of the disease, weakly positive in acute and chronic posterior urethritis, clearly positive in complications, had absolute values in arthritis, whereas management of the disease was associated with a decreased reaction (12).

Dorđević Đ. (Belgrade) treated 100 patients with acute anterior urethral gonorrhea using (intraurethral) adrenaline. Based on previous results, he concluded that acute vasoconstriction reduced exudation and inflammation and facilitated the activity of local therapy (hypermangan and so on) or anti-gonococcal vaccine. In this way, his patients experienced reduction of symptoms, but were not always completely cured (23). In his paper, *Poštić Z.* (Belgrade) outlined that he used the same therapy and assessed it in culture secretes, and a control group treated in a usual way (60: 50 patients). In the first group, positive gonococcal cultures were present for 40 days and in the second group for 140 days (13). These papers showed once again why STDs were a priority issue in dermatology at that time.

Prostate massage therapy was used only in chronic post-gonorrhea prostatitis as reported by *Karwowski A. Sp.* (Poznan) (13).

Three papers presented by *Kotur R*, *Grahov A.* (12), and *Savić M.* (13) (Belgrade), were dealing with results of culture examination of biological characteristics of gonococci and other urethral cocci.

Urethritis simplex also belongs to this group of diseases, because it corresponds with present non-gonorrhea urethritis, regarding its clinical and laboratory findings. *Ošmijanski E.* (Belgrade) reported that he examined 51 patients: 13 previously suffering from gonorrhea. The secret was tested only by microscopy and "Gram-negative, Gram-positive and labile diplococci" were found. The treatment included local potassium permanganate, whereas vaccine from various bacilli cultures, cocci and diplococci showed no results (4). This paper is interesting because it shows the difficult and long-lasting way of both patients and physicians until a definite solution for the disease was found.

Four papers were dedicated to *Nicolas-Favre M.* and his diagnostic methods (reported by *Nicolau St. Gh.*, *Banciu A.* – Bucharest, *Alkalaj N.* – Belgrade, *Naunović N.* – Belgrade, *Kičevac M.* – Belgrade) (4, 13), and one was about *ulcus molle* (*Banciu A.* – Bucharest) (13).

In regard to prevention of venereal diseases, *Prohaska* (Prague) reported about the foundation of a "Station for registration of patients with Venereal Diseases" in Prague with the following tasks: formation of card files of all patients as well as source of infection; mandatory treatment that involved police actions against errant patients; statistical processing; and a plan for creation of networks of such institutions across the country (13).

Eczemas were the second most common diseases reported about at the Congress and they were already the topic of the 8th *International Dermatology Congress* in Copenhagen in 1930. It was still a problem to define eczemas (pointed out by *Gaston P.* – Paris) (4), and its pathogenesis. The participants of the Congress outlined the following: *Walter F.* (Krakow) specified exudative and eczematous skin conditions in the group of constitutional allergic skin conditions; *Ungar J.* (Prague) established the eczematous properties of microbes, while *Čajkovac Š.* (Zagreb) and *Mayer R.* (Breslau) attributed seasonal variations in the incidence of eczema to "non-specific sensitivity" of patients (4). *Schamberger F.* (Prague) (4) reported that he studied formation and disorders of the lymph flow and applied his findings to the occurrence of eczema and exfoliative dermatitis: the process begins with inflammations of different origin; it is followed by lymphostasis, edema and finally acanthosis and diffuse epidermal hyperplasia. *Stopzanski J.* (Krakow) exposed his study on skin surface pH values and established an acid chemical reaction (4), which was in agreement with findings of Schade and Marchionini (24) in 1928, and also remained one of the important markers of skin quality for dermatitis in a broad sense.

The third group of diseases included skin tuberculosis, which was among the most serious diseases at that time. *Nicolau St. Gh.* and *Blumenthal M.* (Bucharest) reported that, by using direct cultures and retrocultures from experimental lesions of guinea pigs, they found human type tuberculosis bacilli in 15 patients and in 2 cases bovine type bacilli. Inoculation of pathological material caused death in 16 of 17 inoculated animals, whereas inoculation of "filtrate" was performed 17 times and caused death of only 3 experimental animals (4).

Two papers were dealing with the management of tuberculosis with salt-free diet (*Malinowski F.* – Wilno;

Ristić L. – Belgrade) (4), but both authors agreed that it was adjuvant therapy. In his patients, *Ristić L.* used scarification and pirogalol at the same time. *Dorić M.* (Zemun) reported about using phosphorilated fish oil and omnadin during 6 – 8 months (4).

Fleger J. (Sarajevo) presented a detailed summary and outlined the relationship between internal and skin tuberculosis (4), expecting it to be the basis for classification of skin tuberculosis which still relied on morphological manifestations (14).

Other skin infections: *Krzyształowicz F.* (Warsaw) distinguished a group of streptococcal skin diseases, based on bacteriological results and identical initial lesions (4); he was known as the initiator of the classification of skin diseases based on the etiology that was later generally accepted (3). *Kićevac M.* (Belgrade) presented his experience about possibilities of immunization against scarlatine by skin streptococcal infection (4).

Enterococci were found in pediatric skin diseases (*Montlaur M. H.* – Paris) (4), whereas *Kićevac M.* (Belgrade) (4) talked, apart from direct enterococcal skin infections, about eczematous as well as distant secondary changes, broadening his concept about streptococcides and staphylococcides, that is streptotoxids and staphylotoxids (25).

Straszynski A. (Warsaw) analyzed 42 cases of mucosal diphtheria and found associated diphtheric changes of the skin in 14 patients. Both types of changes disappeared after treatment with antidiphtheric serum (13).

Milošević S. (Belgrade), a well-known name not only in our dermatological mycology, described a new form of trichophyton, found in trichophytia of the capillitium, and named it after his mentor (*Trichophyton Langeroni*) (9, 26).

Jirman J. (Prague) reported about discovering *herpes virus* infection and some characteristics of this virus. He inoculated rabbits with pathologic material, but he also found it in the blood of infected patients (4).

Without details in his review, *Ilić S.* reported about interesting clinical cases that were presented (4).

During the Congress, there were three exhibitions:

- Exhibition of medications and instruments;
- Exhibition of moulages of the Clinic of Dermatovenereology in Belgrade;

- Exhibition of pathogenic fungal cultures (*Milošević S.*) (13).

Social events were also organized during the Congress. Before the beginning of the Congress, Prof. *Đorđević Đ.* hosted a reception at his home, which was the gathering place of intellectuals and artists in Belgrade. On the second and third night, banquets were held by the Minister of Social Affairs and Public Health and the President of municipalities of Belgrade. On the third day, a banquet was held on board of “Alexander I” cruising on the Danube and Sava. Every day of the Congress, lunch was provided for all participants at the Institute of Physiology and Histology: on the first day, costs were covered by the Congress Organizing Committee and on the second and third day by the ADVY.

During the Congress, the following travel tours were offered: Belgrade – Topola (Oplenac); a two-day boat tour to Đerdap (the price was 380 dinars); a five-day tour to South Serbia (Belgrade, Prilep, Bitolj, Ohrid, Skoplje) by train and car (2250 dinars); a five-day tour to Zagreb, Ljubljana, Belgrade (1300 dinars). The travel expenses were covered by Congress participants, except for the first one (13).

The 2nd Congress of the PSADVs, its professional level and organization, was paid great attention in dermatological publications. Detailed reports were published in “La pressE medicale” (Prof. *Langeron*) and “Romania medicala” (Prof. *Nicolau*). “All previously published reports indicated that the Dermatological Congress held this summer in Belgrade was one of the most successful events for our new medical science” (10).

Prof. *Krzyształowicz*, one of the most eminent dermatologists of the early Polish Dermatovenereology, honorary member of the ADVY, one of the founders of the PSADVs, died shortly after the Congress in 1931. The commemoration was held on November 4, 1931 at the ADVY (10).

In the period after the First World War, international associations between dermatological societies were developed, as well as among dermatologists. *Ilić S.*, professor of dermatovenereology in Belgrade after the Second World War, used to lecture his young dermatology students about the “dermatological fraternity”: “Wherever you may be in the world, search for a dermatologist, and you will

never be alone". The activities were vital for a great number of international dermatological congresses that were held from the late 19th century to the present and are more and more numerous. Although the PSADVs was not long-lived, nor were its congresses, it has shown how beneficial cooperation, exchange of experiences, mutual support and personal contacts, can be.

Abbreviations

ADVVY - Association of Dermatovenereologists of Yugoslavia
PSADVs - Pan-Slavic Association of Dermatovenereologists
STD – Sexually Transmitted Diseases

References:

- Lalević-Vasić BM, Jovanović M. History of dermatology and venereology in Serbia – part IV/1: Dermatovenereology in Serbia from 1919-1945. *Serb J Derm Venereol* 2010;2(1):5-12.
- Skup jugoslovenskih dermatologa i venerologa i osnivanje Jugoslovenskog dermatovenerološkog društva [Meeting of the Yugoslav dermatologists and venereologists and foundation of the Association of dermatovenereologists of Yugoslavia]. *Srp Arh Celok Lek* 1928;30(2):147-9. (Serbian).
- Grzybowski A. Polish dermatology in the 19th and the first half of the 20th centuries. *Int J Dermatol* 2008;47:91-101.
- Ilić S. II kongres Sveslovenskog dermatološkog Saveza [2nd Congress of the Pan-Slavic association of dermatologists]. *Med Pregl* 1931;6(8):229-34. (Serbian).
- Sednica Centralnog odbora Sveslovenskog lekarskog saveza [Meeting of the central committee of the Pan-Slavic medical association]. *Med Pregl* 1930;5(2):64. (Serbian).
- Rešl V, Zahejski J, Hercogova J. Czech society of dermatology and venereology. In: Hercogova J, Delescluse J, Lotti TM, eds. *Millenium dermatologicum. European handbook of dermatological societies*. Hradec Kralove: Auris; 2002. p. 45-50.
- Gorkiewicz-Petkow A, Glinski W. Central East European dermato-venereological association - a short history. *CEEDVA Bulletin* 1999;20(1):3-4.
- Ilić S. II Kongres Sveslovenskog dermatološkog saveza [2nd Congress of the Pan-Slavic association of dermatologists]. *Med Pregl* 1931;6(10):293-4. (Serbian).
- Ilić S. Sveslovenski dermatološki Kongres u Beogradu [Congress of the Pan-Slavic association of dermatologists in Belgrade]. *Med Pregl* 1931;6(11):325-6. (Serbian).
- Ilić S. Sveslovenski dermatološki Kongres u Beogradu [Congress of the Pan-Slavic association of dermatologists in Belgrade]. *Med Pregl* 1931;6(12):353-4. (Serbian).
- Ilić S. Ilić S. Sveslovenski dermatološki Kongres u Beogradu [Congress of the Pan-Slavic association of dermatologists in Belgrade]. *Med Pregl* 1932;7(1):19-20. (Serbian).
- Ilić S. Ilić S. Sveslovenski dermatološki Kongres u Beogradu [Congress of the Pan-Slavic association of dermatologists in Belgrade]. *Med Pregl* 1932;7(2):42-4. (Serbian).
- Ilić S. Ilić S. Sveslovenski dermatološki Kongres u Beogradu [Congress of the Pan-Slavic association of dermatologists in Belgrade]. *Med Pregl* 1932;7(3):62-4. (Serbian).
- Zbirka tekstova referata predatih za II Sveslovenski kongres dermatologa, 1931. Arhiva Dermato-venerološke klinike u Beogradu [Collection of papers submitted for the 2nd Congress of Pan-Slavic dermatologists, 1931. Archive of the Dermatovenereology clinic in Belgrade].
- Redakcija „Medicinskog Pregleda“ pozdravlja II Sveslovenski dermatološki kongres u Beogradu [The Editoroal board of the „Medical Review“ pays respect to the 2nd congress of Pan-Slavic dermatologists in Belgrade]. *Med Pregl* 1931;6(7):177-201. (Serbian).
- Hercogova J, Delescluse J, Lotti MI, eds. *Millenium dermatologicum. European handbook of dermatological societies*. Hradec Kralove: Auris; 2002.
- Final report of the Tuskegee Syphilis Study Legacy Committee. May 20, 1996. [cited 2012 Apr 21]. Available from: http://www.hsl.virginia.edu/historical/medical_history/bad_blood/report.cfm
- „Ethically impossible“, STD Research in Guatemala from 1946 to 1948. [cited 2012 Apr 21]. Available from: <http://bioethics.gov/cms/node/306>
- Kogoj F. Izliječenje sifilisa u vidu novih seroloških reakcija [Cure for syphilis by using new serological reactions]. *Med Pregl* 1931;6(7):180-4. (Serbian)
- Bugarski S. Provokacija spirohete palide i luetičnih oblika pomoću Preglovog rastvora (Presojod Pregl). Inokulacije na zečevima sa skraćenom inkubacijom [Provocation of *Spirochaeta pallidum* and luetic forms using Pregl's solution. Rabbits inoculated with a short incubation period]. *Med Pregl* 1931;6(7):196-8. (Serbian).
- Abraham JJ. Some account of the history of the treatment of syphilis. *Br J Vener Dis* 1948;24(4):153-60.
- Champion RH. Cutaneous reaction to cold. In: Rook A, Wilkinson DS, Ebling FJG, Champion RH, Burton JL, eds. *Textbook of dermatology*. 4th ed. Oxford: Blackwell Scientific Publication; 1986. p. 633-4.
- Dorđević Đ. Delovanje adrenalina kod akutne gonoreje i uspeh lečenja adrenalinom [Effects of adrenaline on acute gonorrhea and its treatment results]. *Med Pregl* 1931;6(7):177-80. (Serbian).
- Schade H, Marchionini A. Der Sauremantel der Haut. *Klin Wochenschr* 1928;7:12-4.
- Kićevac M. Klinika za kožne i venerične bolesti [Clinic of skin and venereal diseases]. U: Medicinski fakultet Univerziteta u Beogradu 1920-1935 [In: School of medicine, University of Belgrade 1920 – 1935. Belgrade: School of medicine]. Beograd: Medicinski fakultet; p. 125-31. (Serbian).
- Milošević S. Jedan slučaj trihofitije izazvan novom vrstom *Trichophyton*-a, *T. Langeroni* n.sp. [A case of trichophytia caused by a new species of *Trichophyton*, *T. Langeroni* n.sp.]. *Med Pregl* 1931;6(7):184-7. (Serbian).

II Sveslovenski kongres dermatovenerologa, Beograd 1931. godine

Sažetak

Organizator: Sveslovensko udruženje dermatovenerologa osnovano je maja 1982. u Pragu na Sveslovenskom kongresu lekara praktičara. Udruženje su sačinjavala: bugarsko, čehoslovačko, poljsko i jugoslovensko društvo, a predsednik je bio poljski profesor Krzyszalowicz F. Prvi kongres ovog udruženja je održan 1929. godine u Varšavi, a Drugi kongres je organizovalo Udruženje dermatovenerologa Jugoslavije u Beogradu, 1931. godine. Predsednik organizacionog odbora bio je prof. dr Đorđe Đorđević, a sekretar doc. dr Milan Kićevac, sa Dermatovenerološke klinike u Beogradu. Na Kongresu su učestvovali predstavnici slovenskih nacionalnih društava, kao i eminentni predstavnici francuske, rumunske, grčke i turske dermatologije; zvanični jezici bili su svi slovenski jezici i francuski; ukupan broj učesnika iznosio je 160 lekara, kao i 60 članova njihovih porodica. Među predavačima bilo je 28 profesora, koji su u tome zvanju bili u vreme kongresa, ili su ga stekli kasnije.

Broj radova: Izložena su 104 referata, a broj radova prema zemljama učesnicama bio je: Jugoslavija 48 (Srbija 37, Hrvatska 3, Makedonija 3, Bosna 5), Čehoslovačka 23, Poljska 18, Francuska 8, Rumunija 5, Turska 1, Grčka 1). S obzirom na broj radova, koji su obuhvatali široko tematsko područje, kao i na značajno učešće eminentnih stručnjaka, kongres je predstavljao presek kroz tadašnju dermatovenerologiju.

Oblasti: Najveći broj referata bio je iz oblasti *polno prenosivih bolesti*: 43 rada (41,35% od ukupnog broja), a *sifilis* je sa 27 referata bio najzastupljeniji. Radovi

su bili pretežno istraživačkog, ali i eksperimentalnog karaktera; teme su bile: imunitet kod sifilisa, procena dijagnostičke vrednosti seroloških reakcija, kongenitalni i endemski sifilis, lečenje STD, kao i prikazi ređih kliničkih slika.

Izdvajamo rad o kongenitalnom sifilisu u Bitolju (Jurčenko D.): u grupi od 5 202 dece školskog uzrasta nađeno je 15,5% slučajeva kongenitalnog sifilisa.

O *gonoreji* je bilo 9 referata, a najznačajniji su bili o terapiji ovog oboljenja, koja se svodila na lokalni tretman i davanje gonovakcine. Uspeh lečenja se manifestovao „smirenjem“ simptoma bolesti, dok je bakteriološko izlečenje često izostajalo ili je nastajalo znatno kasnije.

Drugu grupu bolesti po učestalosti predstavljali su *ekcemi*. Problem je bila definicija i patogeneza bolesti.

Trećoj grupi bolesti pripadala je *tuberkuloza*. Proučavani su rezultati eksperimenata na životinjama i ukazivano je na potrebu reklasifikacije tuberkuloze kože u odnosu na internu tuberkulozu.

Manji broj radova bio je o drugim infekcijama kože, kao i pojedinačni slučajevi raznih dermatosa.

Društveni deo: Bio je organizovan i socijalni deo kongresa, sa prijemima, kao i banket na brodu „Aleksandar I“, koji je plovio Savom i Dunavom. Bili su predviđeni i fakultativni izleti u sve delove Jugoslavije.

Zaključak: Ubrzo posle završetka kongresa u inostranim časopisima objavljeni su izveštaji o njegovom visokom stručnom nivou i izvanrednoj organizaciji.

Ključne reči

Kongresi; Dermatologija; Venerologija; Istorija medicine; Srbija

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EUROMELANOMA 2012

EVROPSKA KAMPANJA PROTIV RAKA KOŽE

PONEDELJAK, 7. MAJ 2012. GODINE

**DERMATOLOZI ĆE OBAVLJATI BESPLATNE PREGLEDE KOD SUMNJE NA RAK KOŽE
DA BISTE ZAKAZALI PREGLED BESPLATNO POZOVITE 0800 222 888 (SAMO ZA POZIVE IZ FIKSNE MREŽE)**

Otvorene linije od 03.05. do 05.05.2012. od 08:00 do 20:00h

ORGANIZATORI: UDRUŽENJE DERMATOVENEROLOGA SRBIJE I EUROMELANOMA EUROPE
POKROVITELJI: MINISTARSTVO ZDRAVLJA REPUBLIKE SRBIJE I EUROPEAN ACADEMY OF DERMATOLOGY AND VENEREOLOGY (EADV)
MEDIJSKI SPONZOR: B92

SPONZOR: KOMPANIJA BEIERSDORF – EUCERIN D.O.O. BEOGRAD
www.euromelanoma.org/serbia
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Euromelanoma Campaign 2012 in Serbia

Clinic of Dermatovenereology, Clinical Center of Serbia, Faculty of Medicine, University of Belgrade, Department of Dermatovenereology, Belgrade, Serbia

Euromelanoma Campaign in Serbia 2012 was organized by Serbian Association of Dermatovenereologists and Euromelanoma Europe, under the auspices of the Ministry of Health of the Republic Serbia, supported by Beiersdorf Eucerin Company. This year, Euromelanoma Monday was set for May 7th 2012. The motto for all participating European countries included in the Campaign was "Do spots bother you?".

The aim of the Campaign was to identify as many people at risk for skin cancer as possible at an early stage as possible, provide information about risk factors and symptoms of melanoma in early stages and alert the public to dangers of sun exposure.

Intense media promotion was organized a month prior to the screening day: radio and TV announcements, informative posters in public areas, newspaper advertisements and PR articles on melanoma and Euromelanoma Day. Poster advertisements and an open line center was founded to provide information about participating dermatologists, addressees and so forth. Websites: www.udvs.org and www.euromelanoma.org/serbia provide basic information about the prevention, screening, diagnosis and treatment of melanoma and other skin cancers.

In order to take part in the Campaign, people could get information on participating dermatologists (their addresses and phone numbers) and make appointments through free of charge phone calls (from 3rd to 5th May, 2012; call center: 0800 222 888 from 08:00-20:00).

A unique anonymous Euromelanoma questionnaire (approved by the Ethic Committee of the Serbian Association of Dermatovenereologists) was translated into Serbian and sent to the participating dermatologists after the list of appointments was closed.

Dermatologists from all over Serbia participated in the Euromelanoma Campaign. 121 dermatologists (~50% of all dermatologists of the Serbian Association of Dermatovenereologists) performed skin screening of patients on their list; there were 114 dermatologists from Public hospitals and 7 dermatologists from private practice. Free-of-charge screening was performed in 1.385 subjects. The screening took place at Dermatology Clinics of Medical Centers, Outpatient Clinics or Private Offices.

The majority of patients screened were female; 927/1.385 (67.3%) females and 450/1.385 (32.7%) males were participated in the Campaign. There was a wide spectrum of ages. Over 71% of individuals were sensitive phototypes II or III. A significant percentage (18.7%) reported outdoor jobs. More impressively, 23.2% of individuals reported sunburns before adolescence, and this may correlate to the fact that most individuals belonged to sensitive photo types. Also, 7.9% used solarium, ≤ 20 sessions per year, and 0.7% >20 sessions per year, which would be worth comparing with other European countries, given its implication in skin cancer risk.

The clinical screen results revealed that 24% of screens had dysplastic nevi, 25.1% AKs, 4.3% BCCs, 0.7% SCCs, while 14.3% were diagnosed clinically as having melanoma. Statistical analysis for patients with melanoma, BCC and SCC suspected lesions was also performed.

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A report on the 27th European Congress of Sexually Transmitted Infections

The 27th European Congress of the International Union for Sexually Transmitted Infections (IUSTI) was held in Antalya (Turkey) between 6-8 September, 2012 with the concept of "Ex Oriente Lux". The scientific program covered two daylong symposia: *Lower genital tract infections* and *HIV and AIDS*, and several Symposia including: *Urethritis/Cervicitis*; *Treatment and the challenge of antibiotic resistance*; *Vulvo-vaginitis*; *HIV in Eastern Europe and Middle East*; *Prevention - what works*; *HIV outpatient management*; *HPV*; and *Management and challenges*. Free Oral Communication Sessions and Workshops were as follows: *Presentation Techniques*; *Elimination of stigma and discrimination around HIV and STIs*; *Genital dermatology*; *STIs in the Middle East*; *Setting up Guidelines*; *Genital herpes - tragedy or hyperbole*;

Clinical challenges in STIs – case discussions; *Clinical trials and statistical methods in STI research*; *Testing strategies for HIV across Europe*; *STI diagnosis: new challenges, new approaches* and *Syphilis and congenital syphilis today*.

The following Plenary Sessions were given: *STI in the digital era*; *HPV vaccination - five years out - what's next?*; *HIV/AIDS in Europe: what we have and what we don't after 30 years of the epidemic?*; *STIs: questions posed, questions answered, questions of the future*; *Dynamics of HSV infection: at population and molecular levels* and *Guidelines - aspiration or inspiration*.

The chair of the International Scientific Committee was Mihael Skerlev from Croatia. Two authors from Serbia, Zoran Golušin and Zoran Nedić had a poster presentation: *Assessment of recurrence rates of genital warts after cryotherapy*.

Zoran GOLUŠIN

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Figure 1. Participants of the Congress from Bosnia and Herzegovina, Croatia, Macedonia, Slovenia and two from Serbia: Dr. Zoran Nedić, standing first to the left and Dr. Zoran Golušin standing first to the right

FORTHCOMING EVENTS

Dermatology and Venereology Events 2012 and 2013

DATE	MEETINGS, CONGRESSES, SYMPOSIA	ABSTRACT SUBMISSION DEADLINE	MORE INFORMATION AT
3-6 October, 2012	XXXIII Symposium of the International Society of Dermatopathology, Santa Cruz de la Sierra, Bolivia	No deadline information	www.isdpbolivia.org
5 October, 2012	Meeting of the Serbian Medical Society's Section of Dermatology and Venereology, Novi Sad, Serbia	No abstract submission	www.sld.org.rs
15-17 October, 2012	13 th IUSTI World Congress (International Union against Sexually Transmitted Infections) Melbourne, Australia	8 June, 2012	www.iusti2012.com
19-20 October, 2012	Onychology Course, Brussels, Belgium	No abstract submission	www.onychologycourse.eu
31 October – 4 November, 2012	1 st Annual Congress of the Dermatologic and Aesthetic International League (DASIL), St. Julians, Malta	No deadline information	www.thedasil.org
1-3 November, 2012	XVII Belgrade Dermatology Days, Belgrade, Serbia	15 June, 2012	www.udvs.org
14-17 November, 2012	6 th World Meeting of Interdisciplinary Melanoma/Skin Cancer Centres and 8 th EADO Congress, Barcelona, Spain	16 September, 2012	www.melanoma2012.com
29 November – 1 December, 2012	European Academy of Allergy and Clinical Immunology (EAACI) Focused Meeting: Skin Allergy Meeting – SAM 2012, Berlin, Germany	30 September, 2012	www.eaaci.net
7-9 February, 2013	Food Allergy and Anaphylaxis Meeting, Nice, France	No deadline information	www.eaaci.net
8-11 May, 2013	International Investigative Dermatology, Edinburgh, Scotland	Early January, 2013	www.iid2013.org
23-26 May, 2013	10 th EADV Spring Symposium, Cracow, Poland	10 November, 2012	www.eadvcracow2013.org
22-26 June, 2013	EAACI – WAO World Allergy and Asthma Congress, Milan, Italy	21 January, 2013	www.eaaci-wao2013.com
27-30 June, 2013	9 th World Congress of Cosmetic Dermatology, Athens, Greece	1 February, 2013	www.erasmus.gr
18-20 July, 2013	8 th World Congress of Melanoma, Hamburg, Germany	24 March, 2013	www.worldmelanoma2013.com
25-27 September, 2013	12 th World Congress of Pediatric Dermatology, Madrid, Spain	No deadline information	www.wcpd2013.com
3-7 October, 2013	22 nd EADV Congress, Istanbul, Turkey	No deadline information	www.eadv.org
4-7 December, 2013	11 th International Congress of Dermatology, Delhi, India	No deadline information	www.icddelhi2013.com

Prepared by: Dr. Tatjana Roš, Clinic of Dermatovenereology Diseases, Clinical Center of Vojvodina, Novi Sad, Serbia

AUTHOR GUIDELINES

Serbian Journal of Dermatology and Venereology is a journal of the *Serbian Association of Dermatologists and Venereologists*. The journal is published in English, but abstracts will also be published in Serbian language. The journal is published quarterly, and intended to provide rapid publication of papers in the field of dermatology and venereology. Manuscripts are welcome from all countries in the following categories: editorials, original studies, review articles, professional articles, case reports, and history of medicine.

Categories of Manuscripts

1. Editorials (limited to 5 pages) generally provide commentary and analyses concerning topics of current interest in the field of dermatology and venereology. Editorials are commonly written by one author, by invitation.

2. Original studies (limited to 12 pages) should contain innovative research, supported by randomized trials, diagnostic tests, outcome studies, cost-effectiveness analysis and surveys with high response rate.

3. Review articles (limited to 10 pages) should provide systemic critical assessment of literature and other data sources.

4. Professional articles (limited to 8 pages) should provide a link between the theory and practice, as well as detailed discussion or medical research and practice.

5. Case reports (limited to 6 pages) should be new, interesting and rare cases with clinical significance.

6. History of medicine (limited to 10 pages) articles should be concerned with all aspects of health, illness and medical treatment in the past.

The journal also publishes book reviews, congress reports, as well as reports on local and international activities, editorial board announcements, letters to the editor, novelties in medicine, questions and answers, and "In Memoriam". All submitted manuscripts will undergo review by the editor-in-chief, blind review by members of the manuscript review panel or members of the Editorial Board. Manuscripts submitted to this journal must not be under simultaneous consideration by any other publisher. Any materials submitted will NOT BE RETURNED to the author/s.

All manuscripts should be submitted to the **Editor in Chief: Prof. Dr. Marina Jovanović**, Clinic of Dermatovenereologic Diseases, Clinical Center of Vojvodina, Hajduk Veljkova 1-3, Novi Sad, Serbia, by mail to: serbjdermatol@open.telekom.rs.

Manuscripts for submission must be prepared according to the guidelines adopted by the International Committee of Medical Journal Editors (www.icmje.org). Please consult the latest version of the Uniform Requirements for Manuscripts Submitted to Biomedical Journals.

1. Manuscript Preparation Guidelines

The manuscript should be written in English, typed in double spacing throughout on A4 paper, on one side only; Use Times New Roman, font size 12, with 30 lines and 60 characters per line. Articles must be written clearly, concisely and in correct English. Accepted manuscripts in need of editing will be returned after editing to the corresponding author for approval. When preparing their manuscripts, authors should follow the instructions given in the *Categories of Manuscript*: the number of pages is limited (including tables, figures, graphs, pictures and so on to 4 (four)), and all the pages must be numbered at the bottom center of the page.

For manuscript preparation, please follow these instructions:

1.1. Title page

The title page should include the following information:

- The title of the article, which should be informative, without abbreviations and as short as possible;
- A running title (limited to 30 characters);
- Authors' names and institutional affiliations;
- The name, mailing address, telephone and fax numbers, and email of the corresponding author responsible for correspondence about the manuscript. Furthermore, authors may use a footnote for acknowledgements, information and so on.

1.2. Abstracts

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provide the context or background for the study, as well as the purpose, basic procedures, main findings and principal conclusions. Authors should avoid using abbreviations.

- An **abstract in Serbian language**, (limited to 150 words) should follow the second page. It should contain a briefing on the purpose of the study, methods, results and conclusions, and should not contain abbreviations.

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4. Additional information

Accepted manuscripts are edited and returned to the corresponding author for approval. Then a final version of the manuscript will be requested in a defined period of time. Authors will be notified of acceptance or rejection by email, within approximately 4 weeks after submission.

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Erratum

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In the original published version of the paper *Peutz-Jegher's syndrome – a case report* by Isidora SBUTEGA, Svetlana POPADIĆ, Petar IVANOVSKI, Biljana ARSOV, Miloš NIKOLIĆ – SJDV 2012; 4 (2): 77-80, there were errata as follows:

Erratum 1. Peutz-Jegher's stands instead of Peutz-Jeghers (page 77) in the Title, first and last sentence of the Abstract, Key Words, first sentence of the paper, first sentence of the Discussion (page 78), in Abbreviations (page 79).

Erratum 2. Peutz-Jegher stands instead of Peutz-Jeghersov (page 80) in the Title and the first sentence of the Uvod.

Erratum 3. Peutz-Jegher stands instead of Peutz-Jeghersovim (page 80) in the 2nd and 4th sentence of the Zaključak.

Erratum 4. Peutz-Jegher stands instead of Peutz-Jeghersovog (page 80) in the last sentence of the Zaključak. The English Proofreader sincerely regrets these errors

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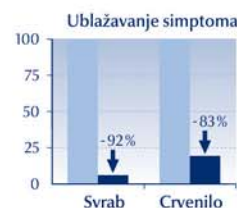
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