

Serbian Journal of Dermatology and Venereology

ISSN 1821-0902

UDC 616.5(497.11)

Volume 1, Number 4, December 2009

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Published by the
Serbian Association of Dermatovenereologists





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The Journal is published four times a year with the circulation of 600. Manuscripts are to be submitted to the Editor-in-Chief: Prof. Dr. Marina Jovanović, Klinički centar Vojvodine, Klinika za kožne i venerične bolesti, 21000 Novi Sad, Hajduk Veljkova 1-7
E-mail: serbjdermatol@nadlanu.com, Tel: +381 21 484 3562; +381 21 451 781.

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Published on behalf of The Serbian Association of Dermatovenereologists by Zlatni presek, Beograd

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**THE BELGRADE DERMATOVENEREOLOGIC, MOULAGE COLLECTION
INSTITUTE OF DERMATOVENEREOLOGY, CLINICAL CENTER OF SERBIA, BELGRADE, SERBIA**



Hair removal in women with an 800-nm diode laser: self-reported satisfaction and expectations from treatment are not the same

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UDC 616.594-08

Abstract

Laser hair reduction is an established method for unwanted hair removal. A significant esthetic component to the treatment necessitates patient-related outcomes are duly taken into account. Satisfaction and expectations may be either interrelated or independent outcome measures. A mail survey was sent out to 250 women who had undergone laser hair removal at least 6 months after their last treatment. The 6-item questionnaire concerned areas of the body treated, number of treatments, perceived hair loss, level of satisfaction with the treatment, fulfillment of expectations from the treatment, and reasons for not being satisfied with the treatment and/or unmet expectations. Response rate to the mail survey was 69%. One hundred fifty five (90%) patients were satisfied with the treatment, whereas 18 (10%) patients were dissatisfied with the treatment. Treatment did not meet expectations in 33 (19%) patients. When looking into the causes of their dissatisfaction and/or unmet expectations, the lower effectiveness was the only factor which significantly affected the above outcomes ($p < 0.05$). Though we intuitively link expectations to satisfaction, their relationship is complex, and further studies should aim at construction of standardized scales to measure patients' satisfaction and expectation, in order to further improve effectiveness of laser hair removal.

Laser hair removal (LHR) is now considered the gold standard for long-term reduction of unwanted hair (1). Despite its widespread use, the number of high quality clinical studies which would help to formulate evidence-based guidelines remained relatively low (2). Considering the esthetic component to the treatment, objective evaluation of LHR must include the patients' assessment of the procedure. The end-users' perspective on the LHR is less frequently documented in comparison to "objective" evaluation (3-6). It included mostly the patient's assessment of the amount of hair loss and hair density, satisfaction with the treatment, preference to other treatment modalities, and willingness to recommend it to friends or family members. Usually it is believed that patients' satisfaction is reached when their expectations from the treatment are met. The other way round,

satisfaction and met expectations may be considered interrelated. Though this is crucially important for our understanding of the way patients evaluate their care, this aspect of their perception is poorly validated (7, 8).

This paper presents results of a mail survey of patients who underwent laser hair removal in our centre with a goal to get preliminary data on their satisfaction and expectations.

Patients and methods

A questionnaire was mailed to 250 women who had undergone laser hair removal in the Dermatology Centre Parmova in 2001-2002, with the last treatment being completed at least 6 months prior to the survey. The survey was anonymous and contained 6 items: areas of the body treated, number

of treatments, perceived hair loss, level of satisfaction with the treatment, fulfillment of expectations from the treatment, and reasons for not being satisfied with the treatment and/or unmet expectations. Perceived hair loss was graded in the following way: a) total hair loss; b) only rare thin hair had remained; c) more than half of the hair removal; d) less than half of the hair had been removed. The overall patient's satisfaction was classified as "very satisfied", "satisfied", and "dissatisfied". Patients had to answer the question if the treatment met their expectations? with "yes" or "no". All women read, filled in and signed a standard laser form and informed consent prior to treatment.

Neither of the women had previously undergone laser hair removal. Patients with recent sun exposure (4 weeks) or photosensitivity were excluded from the treatment. The first appointment consisted of skin examination, consultation, and informed consent. All stages of the first visit were standardized and consultation was designed to offer a patient as much information as needed for the informed consent and answers to questions. All treatments were performed by medical students well-trained in laser hair removal.

Treatments were done with the Light Sheer Diode Laser for hair removal. The device is a semiconductor diode laser system that delivers pulsed infrared light

Table 1. Patients' and treatment's data

Treated sites	Number of patients n= 173	%
Upper lip	107	(62)
Chin	104	(61)
Cheeks	31	(18)
Neck	21	(12)
Abdomen	15	(8.6)
Breast	14	(8.0)
Bikini	27	(15.6)
Thighs	16	(9.2)
Lower legs	18	(10.4)
Back	3	(1.7)
Arms	6	(3.5)
Other	7	(4.0)

at a wavelength of 800 nm, pulse duration 7.5-30 ms, at fluences 15–60 J/cm², on a 9-mm spot size. The handpiece contains an actively cooled sapphire lens that provides thermal protection for the epidermis. Anesthesia was not required. The initial treatment settings were adjusted according to skin phototype, skin colour, hair colour and diameter.

Treatments were repeated every 4-8 weeks (depending on the treatment site) until no regrowth of hair was observed in the treated areas or until the dermatologist or the patient deemed further treatment would not improve the results. The minimal follow-up period was set at 6 months (median 12 months, range 6-18 months).

Chi-squared and Fisher's exact test were used for qualitative variables. *P* value <0.05 was considered significant.

Results

Completed surveys were returned by 173 patients (response rate 69%). Great majority of patients treated

the upper lip and chin – 62% and 61%, respectively (Table 1). The mean number of treatments by patient was 6 (range 2-15). Perceived hair reduction greater than 50% was achieved in 160 patients (92%) after a minimal follow-up period of 6 months. Complete hair loss was rarely reported – only in 7 (4%) patients. The most common outcome was the presence of scarce, thin hair within the treated area – 85 (49%) patients (Figure 1). One hundred fifty five (90%) patients were satisfied with the treatment (40% very satisfied and 50% satisfied), whereas 18 (10%) patients were dissatisfied with the treatment (Figure 2). Among those dissatisfied with the treatment, 42% commented on hair loss after the treatment as "only rare thin hair had been remained" or "more than 50% of hair had been removed". Treatment did not meet expectations in 33 (19%) of patients. Moreover, 64% of patients with unmet expectations commented on hair loss as "more than 50% of hair had been removed". When looking into the causes of their dissatisfaction and/or unmet expectations, Chi-squared test has shown that

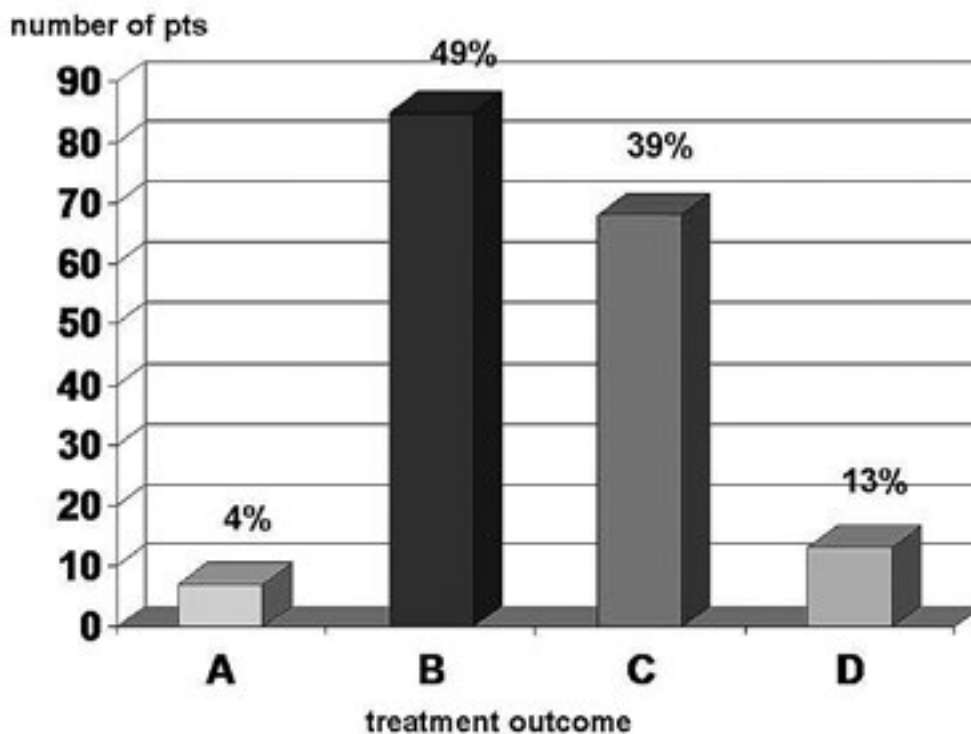


Figure 1. Level of hair loss after laser treatment as perceived by patients. A) total hair loss; B) only rare thin hair had remained; C) more than half of the hair had been removed; D) less than half of the hair had been removed. Pts, patients.

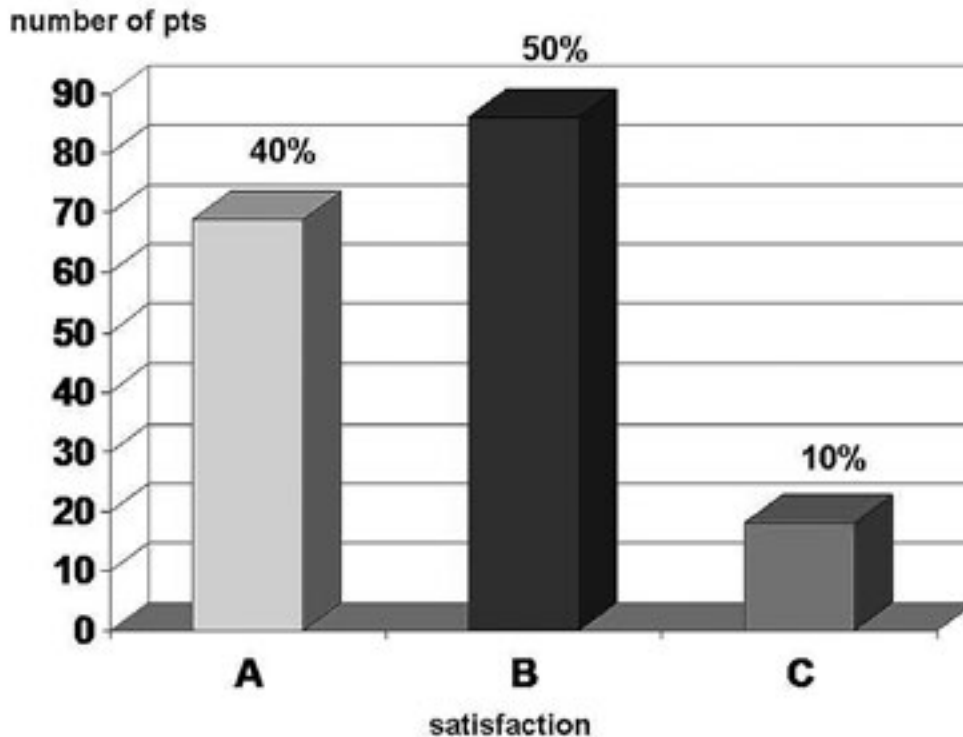


Figure 2. Level of satisfaction by laser treatment as assessed by patients. A) very satisfied; B) satisfied; C) dissatisfied. Pts, patients.

only the lower effectiveness was significantly ($p < 0.05$) related to the treatment outcome in terms of patients satisfaction or fulfillment of their expectations (Figure 3). Fisher's exact test has shown that intraoperative pain, white thin hair and price of the treatment were not significantly associated with the above outcomes.

Discussion

Results obtained by this retrospective survey generally confirm the success rate of the 800-nm diode laser in LHR (2). The response rate to the mail survey was rather high – 69%. The satisfaction rate was comparable or higher than rates reported previously (4, 5). The most unexpected finding revealed by the survey was that a considerable number of patients, while being satisfied with the treatment, still had unmet expectations. Instruments to record and validate patients' expectations are still being developed because it is believed that the expectations are very important for creation and delivery of healthcare (7, 8). Of the 4 reasons for dissatisfaction and/or unmet expectations given by patient only lack of effectiveness

was significantly different between the groups with different expectations and different satisfaction (Figure 3). Among those dissatisfied with the treatment, 42% assessed the hair loss after the treatment as “only rare thin hairs remained” or “more than half of the hair had been removed” thus the outcome may generally be considered as a successful. It implies that a certain number of patients have very high expectations from the laser hair removal, despite the information they get during the first visit. When patients with unmet expectations were analyzed, 64% had actually lost more than 50% of hair, but still thought it was not enough to meet their expectations. The results of the survey show that satisfaction with the treatment does not necessarily mean that patients' expectations are met. They urge for development of tools specially designed to assess satisfaction in patients undergoing laser hair removal using a standard dermatologic quality-of-life scoring system which might be used in certain situations (e.g. in patients with severe facial hirsutism) (9). Patients' expectations should be measured and analyzed separately, due to obvious

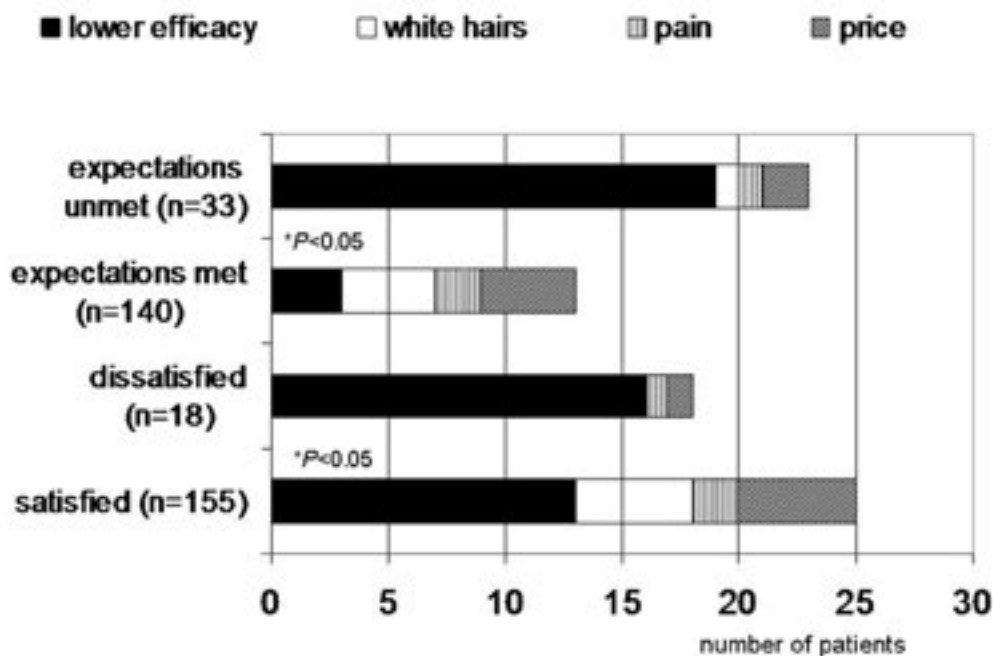


Figure 3. Outcome variables recorded by patients as potential causes for dissatisfaction and/or unmet expectations: *N*, number of patients

complexity of the relationship between satisfaction and expectations (8).

Laser hair reduction is undoubtedly a very effective treatment for removal of unwanted hair, but its effectiveness on the end-user's side may be further improved, not only by technical advancements, but also by fine analysis of requirements for the fulfillment of patients' satisfaction and expectations.

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Uklanjanje dlaka kod žena diodnim laserom talasne dužine 800 nm - zadovoljstvo i očekivanja od postupka nisu isti

Sažetak

Uvod: Lasersko odstranjivanje dlaka je danas standardni način lečenja neželjene kosmatosti. Značajna estetska komponenta lečenja zahteva pažljivu analizu subjektivne procene ishoda lečenja.

Zadovoljstvo i očekivanja pacijenta mogu da budu povezani ali i nezavisni parametri uspešnosti lečenja. Metode: Upitnik je poštom poslat na adrese 250 žena koje su lečene laserskom epilacijom, najmanje

6 meseci posle poslednjeg tretmana. Upitnik je imao 6 pitanja: lečena područja, broj tretmana, procena gubitka dlaka, nivo zadovoljstva lečenjem, ispunjenost očekivanja od lečenja i razlozi za nezadovoljstvo lečenjem i/ili za neispunjena očekivanja.

Rezultati: Upitnik je ispunilo 69% anketiranih. Sto pedesetpet (90%) pacijentkinja bilo je zadovoljno ishodom lečenja, dok je 18 (10%) bilo nezadovoljnih. Lečenje nije ispunilo očekivanja 33 (19%) paci-

jentkinje. Samo je manji učinak lečenja bio statistički značajan za nezadovoljstvo ili neispunjena očekivanja ($p < 0,05$).

Zaključak: Iako očekivanja imaju izvesnog uticaja na zadovoljstvo, njihov međusobni odnos je kompleksan i dalja istraživanja su potrebna da bi se izradile standardizovane skale za merenje zadovoljstva i očekivanja pacijenata, a sa ciljem daljeg unapređenja delotvornosti laserskog lečenja neželjene kosmatosti.

UVA1 Phototherapy in the Management of Sclerodermatous Graft-Versus-Host Disease (GVHD): a report of two cases

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UDC 616.5-004-097:615.831

Abstract

Chronic graft-versus-host disease (GVHD) is a frequent complication after allogeneic hematopoietic stem cell transplantation (HSCT). Approximately 10% of patients with GVHD develop sclerodermatous changes, which can cause significant morbidity and are often refractory to standard systemic immunosuppression. We present two cases of sclerodermatous GVHD. The first is a 39-year-old man, who had a matched sibling, undergoing allogeneic HSCT for severe aplastic anemia. The second patient is a 7-year-old boy, who had an allogeneic HSCT from his HLA-identical mother for acute myeloid leukemia (AML). Both patients presented with widespread sclerotic changes, resulting in joint contractures and significant functional difficulties. Studies have shown UVA1 phototherapy to be a promising and well tolerated treatment modality in patients with sclerotic skin diseases. Both of our patients were treated with UVA1, which resulted in a significant skin softening, improvement in joint mobility and quality of life. UVA1 appears to be an effective treatment for refractory sclerodermatous GVHD; however, long-term clinical studies in larger groups are needed to accurately evaluate its efficacy and safety.

Chronic graft-versus-host disease (GVHD) is the most frequent complication after allogeneic hematopoietic stem cell transplantation (HSCT), occurring in about 50% of patients (1). It is a multisystem disorder, induced and maintained by the donor's immunocompetent cells. The clinical presentation is polymorphic and it can affect any organ system, however, the epithelia of fast proliferating tissues such as the skin, gastrointestinal tract and the liver, are most frequently affected. Whilst this graft-versus-lymphoma effect reduces relapse related mortality, there is considerable morbidity associated with chronic GVHD.

The skin is the most frequently affected organ in chronic GVHD. The clinical features are diverse, and may include poikiloderma, lichenoid eruptions, erythroderma, and sclerosis (2). Oral corticosteroids are the first line therapy for chronic GVHD, but most patients require systemic therapy

beyond corticosteroids, with a median duration of immunosuppression of 23 months (3). Patients with skin GVHD, without other organ involvement, may be treated with skin directed therapy. This includes potent topical steroids, topical tacrolimus, UVB, PUVA or extracorporeal photopheresis (ECP) (4).

Approximately 10% of patients with GVHD develop sclerodermatous changes which can cause significant morbidity, particularly when generalized, and are often refractory to skin directed therapy and standard systemic immunosuppression (5). Longer wavelengths in the UVA region can reach subcutaneous tissue. Studies have shown UVA1 phototherapy (peak wavelengths of 370-380 nm) to be a promising and well tolerated modality in patients with sclerotic skin diseases (6). We report our experience with UVA1 in two patients with sclerodermatous GVHD. The first is a 39-year-old man, who had a matched sibling, undergoing allogeneic HSCT for severe aplastic

anemia. The second is a 7-year-old boy, who had an allogeneic HSCT from his HLA-identical mother for acute myeloid leukemia. Both patients presented with widespread sclerotic changes, resulting in joint contractures and significant functional difficulties.

Case 1

A 39-year-old gentleman (Fitzpatrick skin type II), who had a HSCT for aplastic anemia eleven years before, developed after two years sclerodermatous GVHD with complete loss of mobility of the ankles

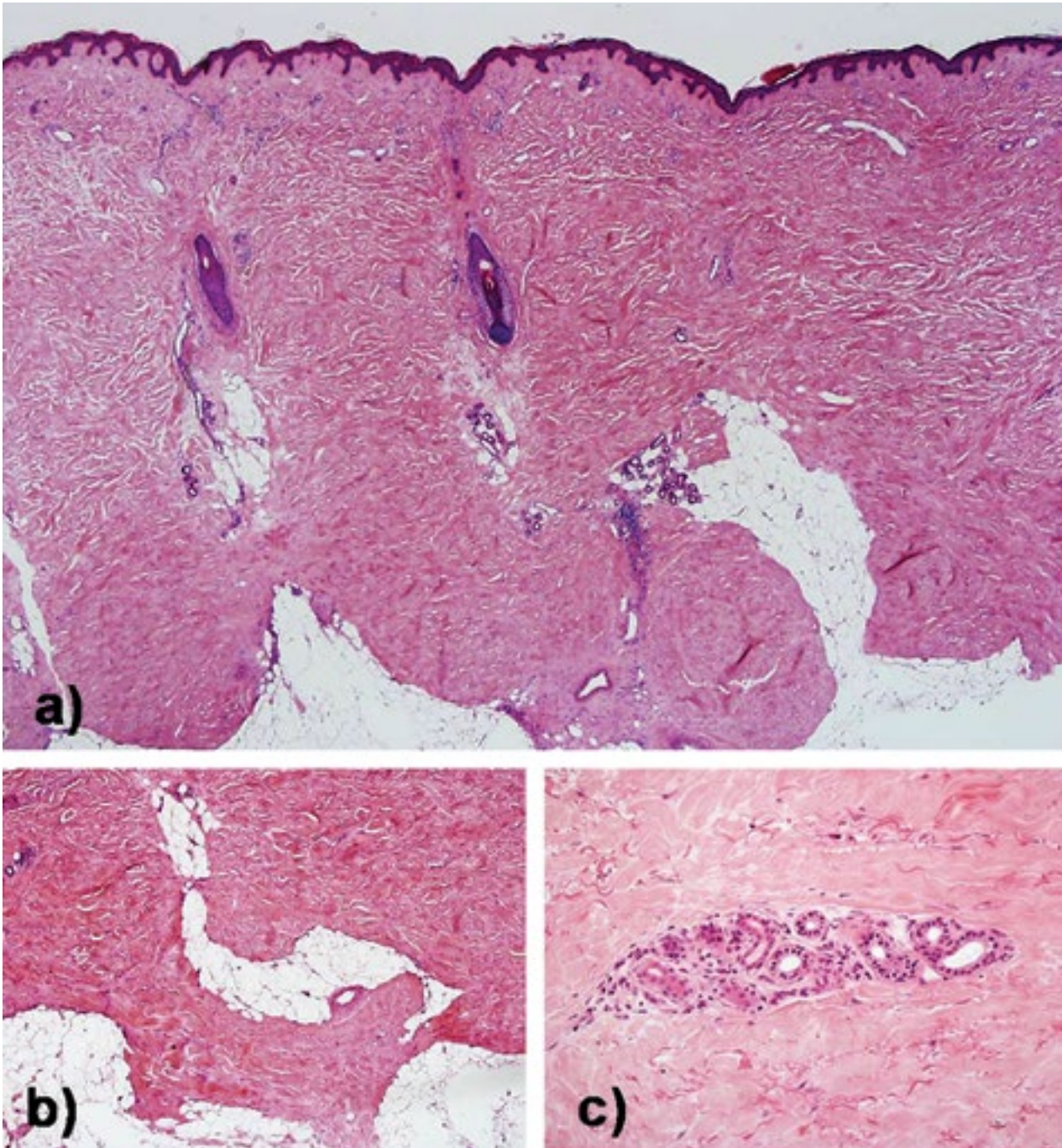


Figure 1. A skin biopsy demonstrated: a) deep dermal sclerosis; b) entrapment of the superficial subcutis by hyalinized collagen; c) peri-eccrine fat pad loss, confirming the diagnosis of sclerodermatous GVHD

and marked thickening of the skin. Apart from the cutaneous changes, he had no evidence of active GVHD elsewhere. Skin biopsy demonstrated sclerosis of the deep dermis (Figure 1a), with entrapment of the superficial subcutis by hyalinized collagen (Figure 1b), with peri-eccrine fat pad loss (Figure 1c), confirming the diagnosis of sclerodermatous GVHD.

The patient was initially treated with oral prednisolone, which was helpful, but resulted in avascular necrosis of both hips requiring replacements. Despite mycophenolate and cyclosporin, the disease continued to progress. A course of UVB phototherapy was used, but without benefit. Then he had a course of oral PUVA, up to three times per week, initially at 13.2 J/cm² and subsequently up to 21.2 J/cm² (total: 83 treatments, 740 J/cm²). PUVA treatment showed mild benefits, but the response was very slow and there were concerns about the cumulative dose, particularly in view of his fair skin and previous immunosuppression with cyclosporin. The therapy was switched over to UVA1 phototherapy (SELLAMED 24,000 System, Sellas, Germany). Following 4 months of treatment (with a total number of 70 sessions, maximum single dose of 75 J/cm², cumulative dose of 5235 J/cm²) the patient reported a >70% improvement from his waist up, however, his legs were still very tight. Therefore he

received a course of high dose UVA1 on the legs (up to a maximum dose of 120 J/cm²) (total: 70 treatments, 5235 J/cm²).

The patient reported that UVA1 helped his skin changes, enabling him to play golf again for the first time in years. The therapeutic benefit has been longstanding, with quality of life and without side effects. His GVHD is currently in remission.

Case 2

A 7-year-old boy (Fitzpatrick skin type II) received an allogeneic HSCT from his HLA-identical mother, two years before, for relapsed AML. After one year he developed severe and extensive sclerodermatous skin GVHD. He did not have any problems with his liver, gastrointestinal tract, chest or eyes. He received two courses of rituximab, which enabled him to gradually reduce, and ultimately discontinue oral prednisolone, and was on oral tacrolimus treatment (1.5 mg twice daily) when he was first referred for UVA1.

The sclerodermatous skin changes resulted in fixed flexion deformities of at least 20° at both elbows (Figure 2a), clawing of the hands (Figure 2b), and inability to keep his heels on the ground, due to fixed flexion deformities of his lower legs, which affected his mobility (Figure 2c). He had several superficial



Figure 2. A child with sclerodermatous GVHD: a) fixed flexion deformities of at least 20° at both elbows; b) clawing of the hands; c) inability to stand with heels flat on the ground due to fixed flexion deformities of his lower legs

ulcerated areas over his scalp with associated scarring alopecia. Due to skin changes he was unable to manage activities of daily living. He had difficulty dressing up, and he was unable to feed independently.

He was treated with UVA1 phototherapy (SELLAMED 24,000 System, Sellas, Germany) three times per week for 10 weeks (up to a maximum dose of 30 J/cm²) (total: 30 treatments, 800 J/cm²). Other skin treatments included regular emollients, topical tacrolimus and physiotherapy. Within 4 weeks of treatment, there was a significant improvement, without side effects. His skin became softer, with better joint flexibility and improved joint mobility, and he was able to go upstairs for the first time. After a month, methotrexate, 10 mg per week, was introduced with continuing improvement.

Discussion

Equipment capable of delivering long-wavelength UVA (340-400 nm; UVA1) has been available since the early 1980s (7), but only in the last decade, there have been published studies investigating UVA1 as a potential treatment modality for various dermatological conditions. Therapeutic effects of UVA1 therapy have been shown in patients with atopic eczema, *lichen sclerosus et atrophicus*, *keratosis lichenoides chronica*, *prurigo nodularis*, cutaneous T-cell lymphoma, *granuloma annulare* and scleroderma (8).

There have been a small number of case reports and uncontrolled studies in the treatment of the sclerodermatous form of GVHD with UVA1 phototherapy. They have shown promising results in the treatment of these patients who were previously resistant to systemic immunosuppressive therapies (5,9-11).

Unlike UVB radiation that can penetrate at the most into the papillary dermis, longer wavelengths in the UVA region have the capacity to reach the subcutis as well (12). UVA1 radiation induces T-lymphocyte apoptosis, as well as reduction of the number of Langerhans cells and mast cells in the dermis, which may contribute to its effect in acute atopic dermatitis (13). In skin sclerosis, the dermis is compacted from the epidermal layer to the sweat glands, and the collagen bundles are thicker with decreased space between them (14). UVA1 irradiation induces collagenase activity, which results in degradation of collagen in sclerotic lesions (15-17).

UVA1 is usually well tolerated with very few side effects. Erythema, tanning polymorphous light eruption, itching and recrudescence of herpes simplex infection are the main acute adverse effects. The major potential chronic adverse effects are photo-aging and skin cancer, and only long-term follow-up of a large number of patients will be able to quantify the risk (18).

Both of our patients were treated with UVA1. In the 39-year-old patient, PUVA therapy showed limited benefits. However, UVA1 phototherapy significantly softened the sclerotic changes, improving joint mobility, allowing the patient to play golf for the first time in a number of years. In the case of the 7-year-old boy, UVA1 was used as an adjunct to methotrexate. It was difficult to define whether the clinical benefit was due to methotrexate, in regard to the UVA1, but there was an obvious skin improvement prior to the introduction of methotrexate. Prior to treatment, he had clawing at his hands, was unable to keep his heels on the ground, and found activities of daily living challenging. Treatment with UVA1 markedly improved the appearance and texture of his skin.

Conclusion

UVA1 appears to be an effective treatment for refractory sclerodermatous GVHD and other sclerotic skin diseases; however, long term clinical studies in larger groups are needed to accurately evaluate its efficacy and safety.

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Abbreviations

- GVHD – graft-versus-host disease
- HSCT - hematopoietic stem cell transplantation
- ECP – extracorporeal photopheresis
- UVA – ultraviolet A
- UVB - ultraviolet B
- PUVA – psoralen and ultraviolet A
- HLA - human leukocyte antigen
- AML – acute myeloid leukemia

UVA1 fototerapija u lečenju sklerodermatoznog oblika hronične GVHD: prikaz dva slučaja

Sažetak

Uvod: Sklerodermatozne promene u okviru hronične *graft-versus-host disease* (GVHD; eng. reakcija transplantata protiv domaćina) javljaju se kod oko 10% obolelih i dovode do značajnog morbiditeta. Ovaj oblik GVHD je veoma rezistentan na terapiju, uključujući sistemsku primenu imunosupresiva, PUVA fotohemoterapiju, UVB fototerapiju, ekstrakorporalnu fotoferezu, kao i lokalnu primenu koristikosteroida i takrolimusa. Za razliku od UVB zraka, zraci većih talasnih dužina unutar UVA spektra, prodiru od hipodermisa i u sklerozom zahvaćenoj koži, putem aktivacije kolagenaze izazivaju sledstvenu degradaciju kolagena. Dosad je objavljen manji broj radova o primeni UVA1 fototerapije (340-400 nm) u lečenju ovog oboljenja.

Cilj rada: Prikazujemo naša iskustva u lečenju dva pacijenta sa sklerodermatoznim oblikom GVHD: kod tridesetdevetogodišnjeg muškarca je u cilju

lečenja aplastične anemije, pre jedanaest godina, izvršena transplantacija matične hemopoetske ćelije sa HLA-kompatibilnog donora; kod sedam godina starog dečaka, obolelog od akutne mijeloidne leukemije izvršena je pre dve godine transplantacija matične hemopoetske ćelije od HLA-identičnog donora, majke.

Klinička slika: Oba pacijenta su imala diseminovane sklerotične promene na koži, izražene kontrakture zglobova i značajne funkcionalne abnormalnosti. Promene su se javile dve godine nakon transplantacije kod tridesetdevetogodišnjeg muškarca i godinu dana nakon transplantacije kod sedmogodišnjeg dečaka i u oba slučaja su bile diseminovane.

Lečenje: Oba pacijenta su lečena UVA1 fototerapijom što je dovelo do omekšanja sklerotičnih plakova, povećanja pokretljivosti zglobova i do ukupnog

poboljšanja funkcionalne sposobnosti, bez neželjenih efekata.

Zaključak: UVA1 fototerapija je pokazala obećavajuće rezultate u lečenju naša dva pacijenta obolela

od sklerodermatozne forme hronične GVHD. Dalja istraživanja su potrebna kako bi se precizno evaluirala njena efikasnost i bezbednost u terapiji ovih pacijenata.

Nodular Mastocytosis of the Vulva and Coexisting Urticaria Pigmentosa

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UDC 616.5:618.16

Abstract

Nodular forms of mastocytosis are rather rare skin diseases, especially when localized on the vulva. A 9-year-old girl presented with urticaria pigmentosa type lesions since her 4th year, associated with several solitary or confluent vulvar nodules, varying in size from a pea to a walnut, and mild systemic symptoms. Diagnosis of mastocytosis was confirmed by histology, and apart from splenomegaly, no signs of systemic spread or associated hematologic disorders were detected. Therapeutic response of nodular lesions was rather poor, and further follow up is necessary.

Mastocytoses are a group of disorders with an increased number of mast cells in the bone marrow, skin, spleen, liver, lymph glands, or gastrointestinal tract. The skin is the most frequently affected organ, with several forms of cutaneous presentations: urticaria pigmentosa (maculopapular), nodular, diffuse and telangiectatic (1-3). Nodular mastocytosis is rare, localized usually on the limbs, scalp or trunk. There have been a few reports in the literature about mastocytosis localized on the vulva (4-7).

Case report

A 9-year-old girl presented with a 5-year previous history of rash on her head and trunk, and nodules in the genital area. Skin lesions appeared for the first time at the age of 4, with sore, red and itchy nodules on the vulva. Papular pruritic eruptions and blisters on the head and trunk appeared later, with residual macular pigmentation. Erythema of the trunk, with intense pruritus, used to occur after warming. On several occasions, heart palpitation lasting for 2-3 minutes, was accompanied by blushing of the face, eyes and trunk,

but resolved spontaneously. After administration of the Ibuprofen syrup, for febrile upper respiratory tract infection, a generalized itchy erythematous eruption appeared, with wheals over the pigmented patches.

The skin lesions on the vulva presented with multiple skin-coloured nodules, pea to walnut-size, solitary or confluent, in tumorous formations on her right labium majus (Figure 1). Pigmented maculopapules with positive Darier's sign were visible on the trunk, forehead, scalp and limbs (Figure 2.). Apart from eosinophilia ($0,793 \times 10^9/L$) and elevated total serum protein level of 85.9 g/L (normal value up to 80 g/L), other laboratory and biochemical findings, were within normal values. Peripheral blood smear, sternal punctate, bone radiography, control values of differential white blood count (eosinophiles $0.348 \times 10^9/L$) were within normal values. Abdominal ultrasound scans revealed splenomegaly (spleen diameter 98x30 mm, normal value up to 88 mm). Ultrasound examination of the pelvis revealed normal anatomy of internal genital organs. Echocardiography showed an aberrant chord of the left ventricle, with normal electrocardiogram.



Figure 1. Numerous skin-coloured nodules of the vulva, pea to walnut-size, solitary and confluent in tumorous formations on the right labium majus

Pathohistological findings of the maculopapular truncal lesions and vulvar nodules were almost the same (Giemsa stain): perivascular dermal mast cell infiltration of medium density, with discrete epidermal hyperkeratosis (Figure 3).

Peroral hydroxyzine, 3x12.5 mg daily, and betamethasone dipropionate 0.05% ointment were applied to the vulvar lesions. Avoidance of key triggers of mast cell degranulation, such as extreme temperatures, certain medications (Ibuprofen) and insect stings was recommended. On control visit, 2 months later, better control of flushing and pruritus was achieved, while the local status on the vulva remained unchanged. Further follow-up was advised.

Discussion

Mastocytosis is characterized with abnormal accumulation of mast cells, associated with wide spectrum of local or systemic symptoms. Although this accumulation may affect all tissues, it most frequently affects the skin. It affects both sexes equally, with bimodal distribution and two peaks: in early childhood and in adulthood, during the second to fourth decade. About 2/3 of patients are children, one half are under the age of 2 years, and about 10% are children 2 to 14 years of age (8). The clinical picture

differs in childhood and adulthood, both regarding the course and association with c-kit ligand mutation (9).

Among different cutaneous types (maculopapular urticaria pigmentosa, nodular, diffuse and telangiectatic), urticaria pigmentosa is the most frequent (70 - 90%) type in children, followed by solitary mastocytoma (1-3). Urticaria pigmentosa most frequently affects infants between the age of 3 and 9 months, in the form of numerous red-brownish pigmented maculas, papules and nodules located on the trunk (8). Nodular mastocytosis is a rare type, localized on limbs, face, scalp or trunk (10-12).

The diagnosis of mastocytosis, based on clinical picture and Darier's sign, was confirmed by presence of metachromatic granules in the mast cells with Giemsa staining of skin biopsy samples. In patients with general symptoms, additional laboratory analyses are recommended, but invasive diagnostic methods (bone marrow biopsy) are seldom necessary (13,14). In our patient, splenomegaly and eosinophilia raised the possibility of a systemic disease. Hepatosplenomegaly may be a sign of systemic mastocytosis in children. Cases of urticaria pigmentosa, associated with hematological malignancies have been reported, most frequently



Figure 2. Urticaria pigmentosa lesions on the trunk

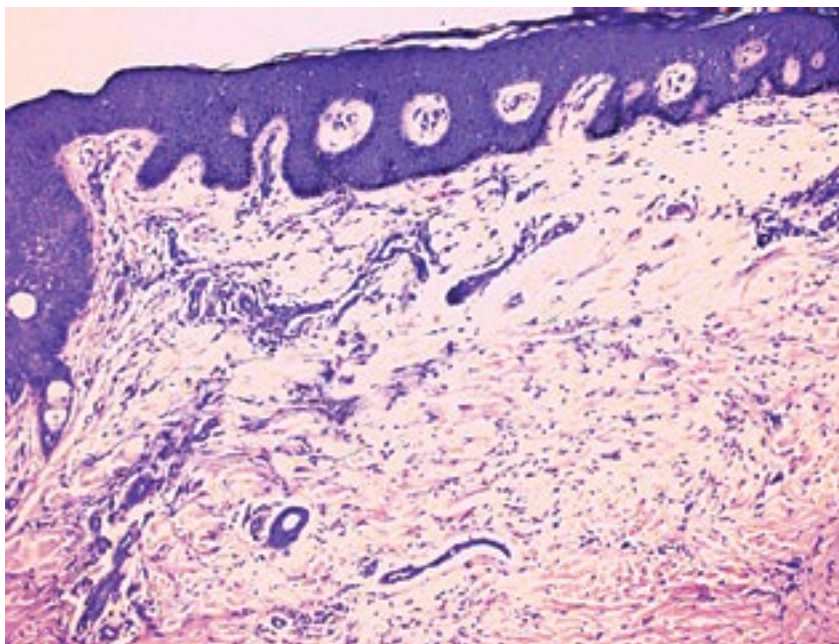


Figure 3. Perivascular dermal mast cell infiltration of medium density, discrete epidermal hyperkeratosis (Giemsa stain, x 100)

with acute myeloid or acute lymphoblastic leukemia (15). A nodular skin mastocytosis, associated with systemic spread, was described in literature (16). In our patient sternal punctate was performed; normal findings excluded the impairment of the hematopoietic system and associated hematological disorders.

Multiple nodular lesions of mastocytosis are rare, usually localized on limbs, face, scalp, trunk, or palms and soles (10,11). Nodular mastocytosis of the vulva is exceedingly rare. Since vulva is an unusual localization, mastocytosis should be considered in the differential diagnosis of such nodular lesions. Schuangshoti et al. (5) described a solitary mastocytoma on labia majora, without truncal lesions. Serarslan et al. (6) first described multiple nodular lesions of the vulva, similar to xanthomata, associated with urticaria pigmentosa. In our case nodules on the vulva were multiple, of normal color of the overlying skin.

Mastocytosis in children can be associated with systemic or local symptoms of mediator release: itch, palpitations, headache and episodic flushing or wheals that can arise spontaneously or after mechanical, physical or chemical stimulation. In our patient, after Ibuprofen administration, generalized erythema of the skin occurred, with a wheal over the pigmented macules.

This patient was diagnosed with benign cutaneous mastocytosis. Associated general symptoms are not predictive for systemic mastocytosis, but splenomegaly associated with increased eosinophil count and nodular skin lesions requires further follow up.

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Nodularna mastocitoza vulve udružena sa urtikarijom pigmentozom

Sažetak

Uvod: Nodularna mastocitoza je redak oblik mastocitoze, posebno kada je lokalizovana na vulvi. Prikaz bolesnika: Prikazujemo devojčicu uzrasta 9 godina, sa promenama tipa pigmentne urtikarije, koje traju od njene četvrte godine, udružene sa pojedinačnim i slivenim nodusima na vulvi, veličine zrna graška do veličine oraha. U više navrata imala je osećaj lupanja srca u trajanju od 2-3 minuta, uz crvenilo i intenzivan svrab očiju, lica i tela, koje je spontano prolazilo. Osim eozinofilije ($0,793 \times 10^9/l$) i ukupnih proteina 85,9 g/l, laboratorijski nalazi su u granicama referentnih vrednosti. Izuzev splenomegalije, nisu utvrđeni znaci sistemske mastocitoze ili udruženih

hematoloških oboljenja. Dijagnoza mastocitoze potvrđena je patohistološkim nalazom kožnih promena na vulvi i trupu. Terapijom hidrokizinom per os i lokalnom aplikacijom betametazon dipropionata 0,05% na noduse na vulvi, postignuta je bolja kontrola „napada crvenila“ i svraba, dok je nalaz na vulvi ostao nepromenjen.

Zaključak: Kod devojčice je postavljena dijagnoza benigne kutane mastocitoze. Opšti simptomi sami po sebi ne ukazuju na sistemska oboljenja, ali je zbog prisustva splenomegalije i eozinofilije potrebno dalje praćenje bolesnika.

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History of dermatology and venereology in Serbia - part III/2: Dermatovenereology in Serbia from 1881 - 1918

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UDC 616.5(091)(497.113)

UDC 616.97(091)(497.113)

Abstract

Owing to the enforced sanitary laws, the health care service in Serbia evolved systematically till the beginning of the Balkan Wars (1912). At the early phase of this period, in general hospitals dermatovenereology diseases accounted for 10.5% (Užice) to 45% (Zaječar), while venereal diseases prevailed (83.3% and 16.7%, respectively). In the period from 1880 to 1897, there were 12.354 Serbian soldiers with venereal diseases: 56.9% had *Gonorrhoea*, 28.9% had *Ulcus molle*, and 14.2% had *Syphilis*. The first official and professional statistics on *Syphilis* was done in 1898, and according to the report, 0.26% of the population of Serbia was affected by *Syphilis*: 1.42% in the Timok Region and 0.27% in Belgrade. Nevertheless, these data must be taken with caution, being very low. In regions with endemic *Syphilis*, tardive and tertiary *Syphilis* prevailed, whereas out of these regions, secondary forms of the disease were most common. In the period from 1882 to 1910, according to the reports of the Sanitary Department of the Ministry of Defense, skin diseases were reported in 3.1% to 15.2% of all hospitalized soldiers. Leprosy was diagnosed in 15 cases in Serbia; notification of all cases became compulsory in 1890. From 1912 to 1918, Serbia was at war, and the most common skin disease was a *dermatozoonosis* – *pediculosos* (lice infestation), which caused a tragic epidemic of exanthematous typhus in the army, but also among civilians. It was estimated that there were 500.000 sick persons, out of which over 150.000 died, including 56% of physicians and other medical staff working in hospitals. Disinfestation was the main treatment modality, using steam in so called "Serbian barrel". At the Thessaloniki front line, in the Dermatovenereology Department, there were 41 dermatoses or groups of dermatoses, affecting the hospitalized soldiers, but scabies was scarce, owing to good hygiene. After the end of the First World War, the Serbian army and population were decimated, and the country ruined. Reconstruction of the country began once again.

At the end of the 19th century, based on the act of the *Sanitary Law*, a regular public health reporting network was developed in Serbia, from peripheral, executive sanitary branches to sanitary authorities. Unfortunately, in the 20th century, most of these invaluable reports, including annual sanitary reports, were ruined or lost during the wars and foreign occupation of Serbia. That is why, using a method of random sampling, 5 monthly reports were taken as crude indicators of the development of dermatovenereology diseases in Serbia during the period 1887 – 1890. The reports were taken from three regional general hospitals (2 from Zaječar, 2 from Niš, and 1 from Užice), distributed from the North-East to the West Serbia. It was established that out of all patients, dermatovenereology diseases accounted for

45% of diseases in Zaječar General Hospital (1, 2), 38.6% in Niš General Hospital (3, 4), and 10.5% in Užice General Hospital (5). These data lack statistical significance, because precise data require larger studies. However, it is obvious that the occurrence of these diseases decreased from the East to the West border of the country. According to these reports, in regard to dermatovenereology diseases, including 84 patients, there were 83.3% of patients with venereal diseases, and 16.7% of patients with skin diseases. The diversity was even higher at the specialized Department of Skin Diseases and Syphilis (DSDS) of the General Public Hospital (GPH) (Figure 1) in Belgrade: in January and February of 1890, there were 94.5% of cases with venereal diseases, and 5.95% with skin diseases (6, 7). Although venereal diseases were treated in hospitals

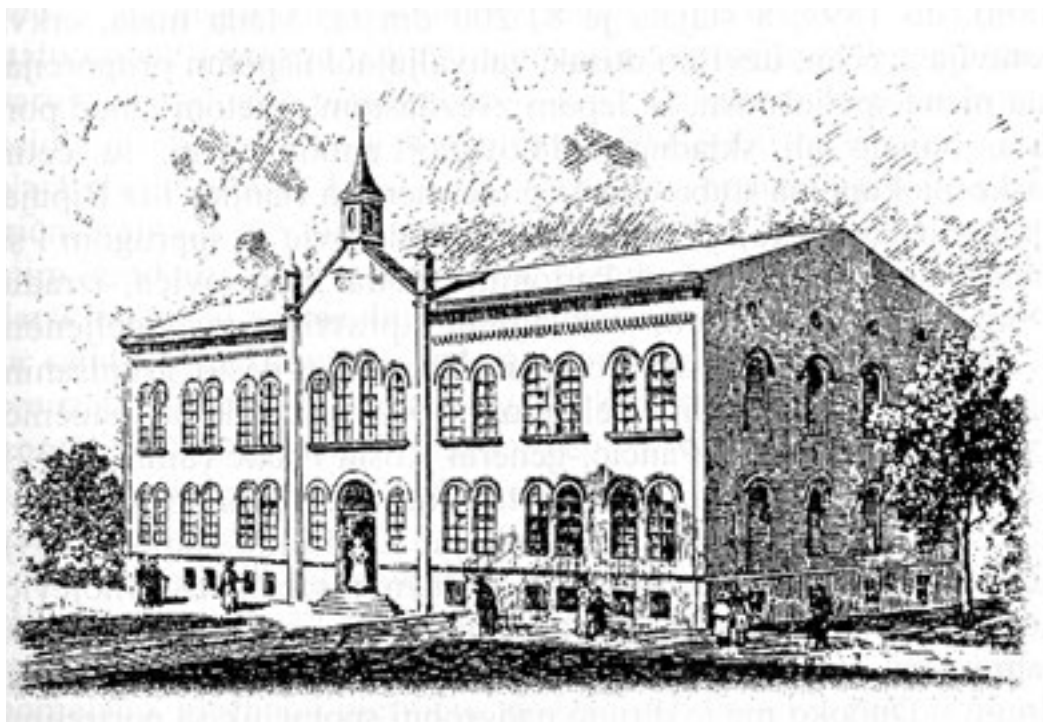


Figure 1. The General Public Hospital in Belgrade

almost by rule, patients with skin diseases were mostly outpatients. However, it is obvious that the former were still predominant. The situation was similar in Europe, which was documented at the International dermatovenereology congresses in Vienna (1892), London (1896), Paris (1900), Rome (1912), and Copenhagen (1930), where *Syphilis* (SY) was in the focus of interest (8).

Venereal diseases

Considering the fact that in regard to civilian, more military sanitary reports were saved, and that it was believed that conditions in the army depicted the “consequences and reactions of the diseases among civilians”, the following data are about the appearance of venereal diseases in the Serbian Army in the period 1880 – 1897: there was a total of 12.354 cases of venereal diseases, out of which 56.9% accounted for *Gonorrhoea* (GO), 28.9% for *Ulcus molle* (UM) and 14.2% for *Syphilis* (SY) (9).

Syphilis

At the turn from the 19th to the 20th century, anti-syphilis services in Serbia satisfied professional requirements, already in practice in Europe. The basic points included: microscopic diagnosis of *Treponema*

Pallidum, Wassermann’s reaction, arsenic therapy (1909) (10), treatment of venereal diseases free of charge (1887, 1895) (9), and prostitution regulations (11). Apart from frequent presentations on syphilis and other skin diseases, in 1899 prevention of SY was the main topic in the Serbian Medical Society (SMS) (12), as well as on the 1st Congress of Physicians in Serbia (1904), where articles on SY presented true research studies (13-16). After the end of the Serbian-Bulgarian war (1885), the period of peace was associated with work on the enforcement of the *Sanitary Law*, but collection of data for sanitary reports about patients with SY was irregular and slow. It was not before 1898, when data on patients with SY were gathered on the whole territory of Serbia. Based on these data, a report was submitted at the International Congress in Brussels. These data were saved in the thesis of Dr. Milutin Perišić: “La syphilis en Serbie” (1901, Nancy). In the total sample, 0.26% of Serbian population suffered from SY; the greatest percentage was recorded in the Timok Region (North-East Serbia) – 1.42%, whereas 0.27% were recorded in Belgrade. Although V. Mihailović considered this to be the first official and professionally done statistics about the spread of SY in Serbia, he thought that the

number of patients must have been higher and he accepted these data with caution, because the number of physicians was insufficient and unfamiliar with that job, the number of statisticians was low, the studied period was short (9), and the knowledge about skin lesions poor (15).

In areas with endemic SY (Eastern Serbia), at the end of the 19th century, SY was still the leading health problem (17). Since there were no hospital reports about the types of SY in that region, based on his own observations and annotations, Micić concluded that primary SY was very rare, whereas tertiary, congenital-tardive and secondary SY occurred in the following relations: 10 : 7 : 2, while there were no registered cases with central nervous system SY (15). However, SY was often registered as the cause of death in young children (18). According to the hospital reports in the Timok Region, during a ten-year period (1894 – 1903), the number of SY patients decreased by 50%, due to the organization of health services (15).

In Belgrade, outside the endemic SY area, according to the aforementioned monthly reports of the DSDS - GPH, the secondary SY was most predominant (74%), whereas the primary (13%) and tertiary (13%) types were rather rare (6, 7). The value of these results, regardless if they originated from hospital reports (DSDS), or personal observations (Micić's analysis), does not exhibit the real situation, because patients with primary lesions rarely visited physicians, for patients with secondary lesions hospital treatment was mandatory, whereas those with tertiary lesions were mostly outpatients (15). As a special treatment modality, mobile hospitals were established, moving from one village to the other (see above). The first case of progressive paralysis (PP) caused by SY was reported in 1889, almost 15 years after Fournier pointed to the association of this disease with SY (parasyphilis) in 1875 (19). In the Hospital for Mental Diseases in Belgrade (1861 – 1904), out of 637 cases of PP, which were considered to be polyetiological conditions and clinically a rather unspecific disease, a retrospective analysis revealed that there were 105 cases with syphilis PP, as well as that "intellectual work" negatively affected appearance of this disease (14).

In regard to the treatment of syphilis, mercury was used in the early stages of the disease, sometimes

combined with iodine preparations; in patients with end-stage syphilis iodine preparations were used (15), and later arsenic as well (10). Early stages of SY were regularly treated in hospitals, whereas those with end-stages were mostly outpatients (15). In any case, the treatment was individual, and patients were considered disease-free and harmless to environment only after 2 years (17). Fournier's belief that rational and accurate treatment was the prophylaxis of this disease was fully accepted (15).

The situation abruptly changed during the war period (1912 – 1918). The First and the Second Balkan War (1912 – 1913), although ending in victory, led to exhaustion of the Serbian army, as well as its equipment, hygiene and health-related issues. In such conditions, Serbia entered the First World War in 1914, against a superior enemy, which was followed by the epidemic of exanthematous typhus. In 1915, under constant attacks of the enemy, the whole Serbian army (20), with the Government, King and numerous refugees (13% of the population) retreated to the island of Corfu (21) which was under the allies. During the exhausting retreat which lasted from November 26th, 1915 to February 20th, 1916 (according to the Julian Calendar), the Serbian army was exposed to hunger, freezing and diseases, acute infectious diseases predominated, and thousands of Serbian soldiers ended their lives in the mountains of Albania. It was estimated that around 80.000 people died during the exodus (22). At the same time, Serbia was under occupation, so that few representatives of the civilian sanitary service in the country were forced to end their organized work. That is why venereal diseases were completely neglected, both in the army and among civilians. The circumstances were so tragic, that there might have been a possibility that the number of diseased even decreased. Since the Archive of the Sanitary Service in Kraljevo was burnt down in 1915, data on diseases of that time, including venereal diseases, are unavailable (23).

Prostitution

The first Circular on Prostitution "regulations" was issued in 1871, by which work of the first "whorehouse" in Belgrade was authorized (16). This regulation was not generally accepted, and some groups of physicians thought that prostitution had to be prohibited (13). The *Sanitary Law* (1881), however

accepted the former standing, and it was elaborated in already mentioned *Circular on Prostitution Regulation*, with basic terms as follows: every prostitute had to be registered in a certain whorehouse (tavern, pub), own a booklet, had to be under the supervision of the Sanitary Police and twice a week visit a specialized physician within the special police office, while sick prostitutes were hospitalized for treatment (11). These regulations on prostitution were revised in 1884 and 1900 (16) and were in effect for years.

Gonorrhoea and Ulcus Molle

Gonorrhoea and UM were rather frequent, sometimes even more than SY (see above). Clinical features corresponded to those in the previous chapter (see Part II). Due to the lack of annual health reports, it is impossible to get more information regarding this issue.

Skin diseases

During the period of peace, there were not many statistical data on skin diseases, because the diseased often chose self-medication, their work capacity was not compromised, and finally they were not used to visiting a doctor or be hospitalized. That is why we have to use the Military Sanitary Reports once again. In the period 1882 – 1910, according to the official reports of the Sanitary Department of the Military Ministry, there exist data for a period of 18 years: out of the total number of hospitalized patients, 3.1% - 15.2% suffered from skin diseases. According to the writer of these reports, a discrepancy was probably the consequence of varied number of outpatient visits, which was 10 – 20 times higher than the number of hospitalized patients. According to the Military Sanitary Reports from 1882, the following dermatoses were reported and in regard to the total number of hospitalized patients they occurred as follows: 4.2% of patients with *Scabies*, 4.2% with *Herpes Tonsurans*, 1.6% with *Eczema* and 2.2% with *Erysipelas* (24).

Serbia of that time was also affected by leprosy. After a thorough examination of the sanitary reports and consulting physicians, in the period 1880 and 1913, J. Žujović found 15 affected patients: 11 with established, and 4 with a probable illness. Out of the total number: 5 patients were from Central Serbia, 3 from the Eastern Serbia near the Romanian and Bulgarian borders, 1 from the border with Bosnia,

2 from Belgrade and 4 cases from other parts of Serbia (10). This disease was given high priority, and a directive was issued: all new cases of leprosy, found while registration of SY was performed, had to be reported to the Ministry of Internal Affairs right away (9), and in 1890 a Special Assembly of the SMS was held, dealing with cases of leprosy in Serbia (12). In the same year, reporting leprosy cases became mandatory (10).

During the war (1912 – 1918), data about dermatovenereology departments were also incomplete and unreliable, whereas their sources were semi-official, semi-private information of high sanitary service managers, and later published articles of the war participants (23).

The most significant skin disease during the war was one of the dermatozoonoses – pediculosis, which spread among the civilians after the Balkan wars (1912 – 1913), and even more in the army. It caused a disastrous epidemic of spotted typhus (20) which lasted from November 1914, to March 1915. It was estimated that around 500.000 people were affected by spotted typhus in Serbia. Out of the total number, about 150.000 died, as well as 30.000 Austrian prisoners (23). Many physicians also lost their lives, but the number was not completely established; according to one source, 124 physicians died from spotted typhus (20), while according to another, 56% of physicians and health care professionals who worked in hospitals, also lost their lives due to this disease (23). At the end of 1914, the National Board for the Eradication of the Epidemic, tried without success, depedication with sulphur and later with naphthalene. Successful treatment, however, was achieved after steam disinfection using improvised tin barrels, designed by an English doctor in Kragujevac, Dr. William Hunter, who named it “Serbian Barrel” (25). After the epidemics, only 200 physicians, capable of work remained (23), and they took part in the Serbian army during the breakthrough of the Thessaloniki front (25). Naturally, we don't have any data on other dermatovenereology diseases of that time. However, foundation of a *Department for Skin and Venereal Diseases* in the *Prince Alexander Serbian Reserve Hospital* at the Thessaloniki front in 1917 (see above), means that these diseases still existed. Kopsa had no data about the number of patients with skin

diseases during the existence of this department, but reported 41 dermatoses or groups of dermatoses affecting the soldiers. The spectrum of dermatologic diagnoses was very wide and corresponded with current dermatologic knowledge in Europe brought by educated physicians. Among them, there were a great number of patients with eczemas caused by intertrigo, filth, itching and scratching, with dermatozoonoses and scabies, as well as cooker eczema. A form specific for war periods was caused by gun and shrapnel injuries, in open and complicated fractures (mostly due to suppuration and iodine), which were treated by x-ray or medications. Many soldiers suffered from fungal and pyococcal diseases. Exanthematous diseases caused by medications were also frequent, but misdiagnosed as Morbilli, exanthematous typhus or SY. Scabies was least present at the Thessaloniki front, because bathing was frequent and obligatory, while great attention was paid to hygiene (24).

After the end of the First World War, the decimated Serbian army returned to their ruined country. Following the army, refugees and young people who gained education during the war in allied countries returned to their homeland as well.

Conclusion

Reconstruction of the country began once again.

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Abbreviations

- SMS – Serbian Medical Society
 GPH – General Public Hospital
 SY – Syphilis
 GO – Gonorrhoea
 UM – Ulcus Molle
 PP – Progressive Paralysis
 DSDS – Department of Skin Diseases and Syphilis

Istorija dermatologije i venerologije u Srbiji – III/2: Dermatovenerologija u Srbiji u periodu od 1881. do 1918. godine

Sažetak

Organizacija dermatovenerološke službe: U ovom periodu su doneseni sledeći sanitarni zakoni: *Zakon o uređenju sanitetske struke i čuvanju narodnog zdravlja* (1881), koji je sadržavao mere za sprečavanje veneričnih bolesti i mere za ograničavanje bluda; *Narodni sanitetski fond* (1881) sa samostalnim budžetom za zdravstvo; *Raspis o besplatnom lečenju sifilisa* (1887).

Bolnice: Osnovana su kožno-venerična odeljenja: u Opštoj državnoj bolnici u Beogradu (1881), u Opštoj vojnoj bolnici (1909), ponovo je otvorena Knjaževačka bolnica za sifilis (1881), kao i pokretne i privremene bolnice za lečenje sifilisa i mreža sreskih i opštinskih bolnica. U periodu 1912-1918. godine nastaje ratni period, u toku kojeg dominira vojnosanitetska služba, pa je 1917. otvoreno u Solunu *Kožno-venerično odeljenje* u okviru *Srpske rezervne bolnice prestolonaslednika Aleksandra*.

Lekari: Prvi srpski dermatovenerolog bio je dr Jevrem Žujović (1860-1944), a potom dr Milorad Savičević (1877-1915). Kožne i venerične bolesti lečili su lekari opšte prakse, hirurzi, internisti i neurolozi. Iako

„nedermatolog“, Laza K. Lazarević (1851-1890), lekar i književnik objavio je tri rada iz Dermatovenerologije, a dr Milorad Gođevac (1860-1933) značajnu studiju o endemskom sifilisu.

Dermatovenerološka oboljenja: Od 1885. godine do 1912. napredovala je organizacija dermatovenerološke službe. Zahvaljujući donesenim sanitetskim zakonima zdravstvena služba u Srbiji će se sistematski razvijati do početka balkanskih ratova (1912). U ranoj fazi ovog perioda pojava dermatoveneroloških oboljenja u opštim bolnicama kretala se od 10,5% (Užice) do 45% (Zaječar) i to pretežno na račun veneričnih bolesti (83,3% prema 16,7%).

Venerične bolesti: U srpskoj vojsci, od ukupno 12354 osobe obolele od veneričnih bolesti, u periodu 1880-1897. godine, gonoreja je bila prisutna kod 56,9%, meki šankr (lat. *Ulcus molle*) kod 28,9% i sifilis kod 14,2%. Prva zvanična i stručno urađena statistika sifilisa je iz 1898. i prema njoj u Srbiji je ovo oboljenje postojalo kod 0,26%, u Timočkome okrugu kod 1,42%, a u Beogradu kod 0,27% stanovništva, mada se ove brojke primaju s rezervom, kao niske.

U krajevima s endemskim sifilisom preovlađivao je tardivni i terciarni sifilis, a van njih sekundarni oblici bolesti.

Bolesti kože: U periodu od 1882-1910. godine, prema izveštajima Sanitetskog odeljenja Ministarstva vojnog, kožne bolesti su nađene kod 3,1% do 15,2% od svih hospitalizovanih vojnika. Dijagnostikovano je 15 slučajeva lepre; prijavljivanje ove bolesti je postalo obavezno 1890. godine. Od 1912-1918. Srbija ulazi u ratni period, kada je najznačajnija kožna bolest dermatozoonoza – pedikuloza, koja dovodi do tragične epidemije egzantemskog tifusa u vojsci, ali i

u narodu. Procenjuje se da je bilo 500 000 bolesnih, od kojih je umrlo preko 150 000, kao i 56% lekara i drugog medicinskog osoblja zaposlenog u bolnicama. Za lečenje je bila najvažnija depedikulacija, postignuta pomoću vrele pare u tzv. »srpskom buretu«. Na Solunskom frontu, na tamošnjem Kožno-veneričnom odeljenju među svim hospitalizovanim vojnicima, dijagnostikovana je 41 dermatozozna ili grupa dermatozozna, ali je skabijesa bilo malo jer je higijena bila dobra.

Zaključak: Posle I svetskog rata, Srbija je imala desetkovanu vojsku i narod i razorenu zemlju. Ponovo je počela obnova zemlje.

Dr. Zoran Maravić

1964 – 2009



There are moments when we realize that life is only a short flight between the two mysteries, the mystery of life and the mystery of death.

On September 2nd, 2009, our esteemed colleague and friend, Dr. Zoran Maravić, unexpectedly passed away. Zoran was born on April 5th, 1964, in Belgrade. He graduated from Medical High School in Novi Sad in 1982. As a graduate medical student he was sent to the war zone in Croatia. He was shot in the head and underwent surgery. After recovery, he successfully graduated from the Faculty of Medicine in Novi Sad in 1993. He also completed his internship and residency in Novi Sad.

In 1996, Dr. Zoran Maravić started his specialization in dermatovenereology at the Clinic of Dermatovenereology Diseases in Novi Sad. During specialization, he showed great interest in allergic

diseases and allergy testing in dermatology. With great commitment he received patients in the Clinic Allergy Office.

He passed his specialization exam in dermatovenereology with excellence in 1999 and was awarded a Specialist Diploma in Dermatology Diseases at the Faculty of Medicine of the University of Novi Sad.

He worked as a specialist in dermatovenereology in the Students' Outpatient Clinic in Novi Sad, where he introduced current diagnostic and therapeutic techniques in the treatment of skin diseases in the young population. He was a true professional, outstanding and dedicated as a physician and as a man. He was appointed a director of the Students' Outpatient Clinic in Novi Sad in 2008.

Since 2000, he was a regular member of the Medical Society of Physicians of Vojvodina of the Serbian Medical Society. He regularly took part in all meetings and congresses of dermatovenereologists.

He was known as a young man of enthusiasm and knowledge who wished to help those who were still learning and taking the less travelled path, the path of knowledge and science. He was always ready to help, a physician worthy of the Hippocratic Oath, a friend worth having. His premature death stopped him to make a few more steps towards the aim we all share.

He will be missed greatly for all of the laughter and humor he brought into our lives, as well as for his skills to cope with any situation. Our gatherings will never be the same, because Zoran new how to cure boredom, how to make an atmosphere and lift the mood to euphoria. Behind his smile, however, was a man of great seriousness, dedication and kindness.

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A report on the 10th International Congress of Dermatology

The Golden Jubilee World Congress of the International Society of Dermatology was held in Prague, from 20–24th May, 2009. This Society was founded as The International Society of Tropical Dermatology by two visionaries, Aldo Castellani (1877-1971) and Frederick Reiss (1891-1981). On 10th May, 1960, the Inaugural Meeting of The International Society of Dermatology was held in New York City, followed by the inaugural lecture given by the 82-year old Aldo Castellani himself at the New York Academy of Medicine. Frederick Reiss announced that there were 1300 charter members representing more than 50 countries. The first Congress was held in 1965 in Naples (Italy). It was attended by 700 members from 66 nations with a total attendance of 1000 registrants. Two hundred and ten papers were presented. The hosts of the following congresses were: Kyoto - Japan (1969), Sao Paulo -Brazil (1975), New Orleans - USA (1979), Mexico City - Mexico (1984), Rio de Janeiro -Brazil (1989), New Delhi - India (1994), Cairo - Egypt (1999) and Beijing - China (2004).

The 10th Congress in Prague gathered 3740 participants from 105 countries. Participants from the four corners of the world joined together for scientific and clinical exchanges with an intriguing agenda headed by international experts as well as clinicians and investigators presenting classical and varying viewpoints and a variety of hot topics in medical, surgical, pediatric and cosmetic dermatology, dermatopathology, tropical diseases and HIV/AIDS. There were more than 700 chairs, co-chairs and speakers from around the world presenting more than 1000 lectures in 150 scientific sessions.

Participation of dermatovenereologists from Serbia was significant and, 19 participants received a scholarship of the International Society of Dermatology. Ljiljana Medenica was the chairperson in the session „What's Your Diagnosis?“ where the following experts took part: Ljiljana Medenica, Željko Mijušković, Mirjana Milinković and Jelena Stojković-Filipović. Mirjana Milinković was also a chairperson in

one of the sessions: Rapid Communication. In other Rapid Communication Sessions the following lectures were presented: „Displastic Nevus: An Exception to the ABCD Rule“ by Mirjana Popadić, „Nonablative Radiowave Surgery Plus Tretinoin for Eyelids Laxity and Periorbital Skin Rejuvenation“ by Igor Jeremić and Miodrag Milojević. The lecture „Changes of the Hair and Nails Associated With Sexually Transmitted Diseases“ by Zoran Nedić, Zoran Golušin and Mirjana Milinković was presented at the symposium „Sexually Transmitted Diseases“.

Serbian authors exhibited 19 posters under the following poster topics: Adverse Drug Reactions, Bullous Diseases, Dermatological Surgery, Genodermatoses, Internal Medicine, Lasers, Melanoma, Mucous Membranes, Non-Melanoma Skin Cancers, Pediatric Dermatology, Pharmacology and Drug Therapy, Prevention in Dermatology, Psoriasis and Related Disorders, Skin Carcinomas and STD&AIDS.

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A report on the 18th Congress of the Serbian Association of Dermatovenereologists

The 18th Congress of the Serbian Association of Dermatovenereologists (SADV) with International Participation was held in Sava Center, Belgrade, 4-6 June, 2009.

The Congress motto was “Dermatology – Tradition and Innovation”, which was aimed to complete the 17th SADV Congress's goal: “Continue the Tradition”.

The President of the Congress was Professor Miloš Nikolić, and the Congress Secretaries were Dr. Svetlana Popadić and Dr. Dušan Škiljević.



Figure 1. Honorary membership of the SADV was awarded to all the invited lecturers. Prof. Medenica and Prof. Nikolić with all the guests from abroad (In the first row: Prof. M. M. Black – UK, Prof. M. Nikolić – Serbia, Prof. N. Tsankov – Bulgaria, Prof. J. Kazandjieva – Bulgaria, Prof. J. McGrath – UK, Dr. M. Lens – UK, Dr. M. Trakatelli – Greece, Prof. M. Balabanova – Bulgaria, Dr. Lj. Novaković – UK, Prof. A. Stanimirović – Croatia; In the second row, standing: Dr. M. Daub – Libya, Prof. A. Kanwar – India, Dr. K. Fritz - Germany, Prof. J. Pace – Malta, Dr. A. Kobza-Black – UK, Prof. Lj. Medenica – Serbia, Prof. N. Stavrianeas – Greece, Prof. A. Katsambas – Greece, Prof. A. Sary – Austria, Prof. R. Happle – Germany, Prof. M. Skerlev – Croatia, Prof. M. A. Gurer – Turkey, Prof. J. Szepietowski – Poland)

The Congress was attended by 350 participants – mostly dermatovenereologists, but also plastic surgeons, pediatricians, and other specialists from Serbia, Croatia, Bosnia and Herzegovina, Macedonia, Montenegro, with active participation of distinguished lecturers by invitation from European countries, USA and India.

There were 25 lecturers by invitation who presented their results: Martin Black (UK), Carlo Gelmetti (Italy), Anne Kobza-Black (UK), Jacek Szepietowski (Poland), Ana Gorkiewicz-Petkow (Poland), Mihael Skerlev (Croatia), Maria Balabanova (Bulgaria), Tanja Paninšek-Ručigaj (Slovenia), John McGrath (UK), Amrinder Kanwar (India), Angelika Sary (Austria), Robert Sarkany (UK), Rudolf Happle

(Germany), Nikolai Tsankov (Bulgaria), Marko Lens (UK), Myrto-Georgia Trakatelli (Greece), Jana Kazandjieva (Bulgaria), Andreas Katsambas (Greece), Joseph Pace (Malta), Mehmet Ali Gurer (Turkey), Andrija Stanimirović (Croatia), Nikolaos Stavrianeas (Greece), Klaus Fritz (Germany), Aleksandar Krunic (USA) and Ljubomir Novaković (UK) (Figure 1).

Also, 11 eminent professors of dermatology from Serbia were invited to present Plenary Lectures: Miloš Nikolić, Radoš Zečević, Sonja Vesić, Ivana Binić, Danilo Stevanović, Ljiljana Medenica, Đordije Karadaglić, Marina Jovanović, Lidija Kandolf-Sekulović, Verica Đuran and Milenko Stanojević.

Besides the Plenary Lectures, the attendees of the Congress had the opportunity to hear 27 free



Figure 2. Relaxing after the Congress: a cruise on the Danube river.

communications, 30 interesting case reports, and to see 36 posters.

There were 6 Company-sponsored Symposia, with 11 lectures.

The Opening Ceremony took place in Sava Center, on 4th June at 6 o'clock p.m. with a brilliant performance of the Academic Choir "Obilić", with Darinka Matić-Marović as a conductor. The ceremony was followed by a Welcome Cocktail Reception.

The Gala Dinner took place in the House of the Serbian Army, at the Republic Square in Belgrade, on 5th June, 2009.

During the Closing Ceremony, Professor Marina Jovanović, the president of the Awards Committee (other members: Prof. Milenko Stanojević, Prof. Radoš Zečević, Prof. Ljiljana Medenica and Prof. Miloš Nikolić), pronounced the winners: the Award for the Best Free Communication was awarded to Dr. Jelena Stojković-Filipović, while two equal Awards for the best Case Reports were given to Dr. Mirjana Gajić-Veljić and Dr. Lidija Kandolf-Sekulović.

In the evening after the Closing Ceremony, the guests from abroad, together with the members of the Scientific and Organizing Committees and other participants, enjoyed a cruise on the Danube and Sava Rivers on the ship "Sirona" (Figure 2).

The main Congress sponsors were Belupo, Croatia (Diamond Sponsor), Beiersdorf-Eucerin, Germany (Golden Sponsor) and Schering-Plough, USA (Silver Sponsor).

Further details regarding the 18th SADV Congress can be found on the official site of the Serbian Association of Dermatovenereologists: www.udvs.org.

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A report on the 18th Congress of the European Academy of Dermatology and Venereology

More than 7000 participants gathered at the International Congress Center in Berlin from 7-11th October, 2009 at the 18th EADV Congress.

Berlin is an important city for the world dermatology. Dermatology World Congress was held in this city in 1987. During the last decades of the 19th century, Berlin became one of the major European Centers for Dermatologists all over the world.

Participants from all parts of the world joined together for clinical, as well as for scientific exchanges.

Participation of dermatologists from Serbia was well appreciated, because most of the participants from our country had presentations.

Participants from Serbia presented 62 posters in 43 submission topics. Reports of the country representatives were given at the Euromelanoma European Society Session within the Euromelanoma campaign in 2009. Ljiljana Medenica presented the report from Serbia.

The Congress included plenary lectures, courses, symposia and workshops, organized and delivered by experts who are on the cutting edge of their respective fields.

The program of the 18th EADV Congress included 7 plenary and 4 "What's new sessions", 20 courses, 45 symposia, 32 workshops, 15 lunch sessions, 6 interactive self-assessment sessions as well



Figure 1. Dr. Novak Rajić from Novi Sad (standing in the fourth row), at the EADV scholarship awards ceremony in Berlin

as 14 free communications for which 1691 abstracts were submitted and reviewed.

This year, 19 satellite and 5 „Meet the Expert“ events provided in-depth discussions on the progress and on the newest findings in the diagnosis and treatment of various conditions.

Various topics raised attention, but for this report we selected the following: Acne, Nail Diseases, Diagnosis and Management of Vasculitis, Rosacea and Other Facial Dermatoses, Human Papillomaviruses, New Drugs, New Adverse Skin Reactions, Novel Therapeutic Options for Skin Diseases, Rare Diseases in Europe-Underestimated and Overlooked?, Rare Neoplasms of the Skin, Management of Skin

Diseases in Pregnancy, Skin Infections with Systemic Involvement, Stress and Skin, Mycrographic Surgery-Sd-Histological Guided Surgery, How to Organize a Dermatological Office, Molecular-Targeted Therapy of Malignancies, Is There a Place for Alternative Medicine in Dermatology?, and Patch Testing Updates.

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FORTHCOMING EVENTS

Dermatology and Venereology Events 2010

DATE	MEETINGS, CONGRESSES, SYMPOSIA	ABSTRACT SUBMISSION DEADLINE	MORE INFORMATION AT
21-23 January, 2010	International Congress of Aesthetic Dermatology, Bangkok, Thailand	20 September, 2009	www.euromedicom.com/index.php
18-23 March, 2010	7 th World Congress of The International Academy of Cosmetic Dermatology (IACD), Cairo, Egypt	30 November, 2009	www.cairoderma.com
26-28 March, 2010	Hair and Scalp Diseases in Clinical Practice. Course and Symposium, Warsaw, Poland	Under construction	www.spederm.eu
7-10 April, 2010	13 th World Congress on Cancers of the Skin, Madrid, Spain	15 February, 2010	www.wccs2010.com
8-11 April, 2010	Winter Academy of Dermatology, III Congress - St. Moritz, Pontresina, Switzerland	31 January, 2010	www.winteracademy.net
13-15 April, 2010	Dubai World Dermatology & Laser Conference & Exhibition, Dubai, UAE	30 November, 2009	www.dubaiderma.com
13-16 May, 2010	7 th EADV Spring Symposium Cavtat, Croatia	10 January, 2010	www.eadvcavtat2010.com
20-22 May, 2010	10 th ESPD (European Society for Pediatric Dermatology) Congress, Lausanne, Switzerland	14 December, 2009	www.espd2010.com
16-19 June, 2010	6 th Congress of the European Association of Dermatologic Oncology, Athens, Greece	28 February, 2010	www.eado2010.org
1-4 July, 2010	The Congress of the Psoriasis International Network, Paris, France	15 February, 2010	www.pso2010.com
9-11 September, 2010	40 th Annual ESDR Meeting (European Society for Dermatological Research), Helsinki, Finland	Under construction	www.esdr.org/index.php
15-18 September, 2010	10 th Congress of the European Society of Contact Dermatitis, Strasbourg, France	March, 2010	www.escd-gerda2010.com
6-10 October, 2010	19 th EADV Congress, Gothenburg, Sweden	Under construction	www.eadv.org/eadv-meeting
21-23 October, 2010	XXXI Symposium of the International Society of Dermatopathology, Barcelona, Spain	Under construction	www.isdpbarcelona2010.net
4-7 November, 2010	1 st World Congress on Controversies in Plastic Surgery and Dermatology, Barcelona, Spain	4 August, 2010	www.comtecmed.com/coplasdy/2010

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@nadlanu.com.

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

A structured abstract in English (limited to 150 words) should follow the title page. The abstract should

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.

1.3. A list of abbreviations

Use only standard abbreviations, because use of non-standard abbreviations can be confusing to readers. Avoid abbreviations in the title, abstract and in the conclusion. A list of abbreviations and full terms for which they stand for should be provided on a separate page. All measurements of length, height, weight, and volume should be reported in the metric units of the International System of Units – SI, available at <http://www.bipm.fr/en/si/>.

1.4. Cover Letter

Manuscripts must be accompanied by a cover letter, which should include a date of submission, statement that the manuscript has been read and approved by all the authors and that the authorship requirements have been met. It should also include the name, address, and telephone number of the corresponding author, who is responsible for communicating with other authors about revisions and final approval of the proofs. The original copy of the cover letter, signed by all authors, should be enclosed with the manuscript.

2. Tables and illustrations

Tables should capture information concisely and precisely. Including data in tables, rather than in the text, reduces the length of the article itself.

- Submit tables in separate files, not included in the manuscript. Tables are to be double spaced and numbered sequentially, with Arabic numbers (Table 1, Table 2, etc.), in order of text citation. Each column, including the first, must have a heading. Provide a brief title for each table. Put all explanatory matter in

footnotes, including any nonstandard abbreviations used in the table.

- **Figures** should be submitted in a separate file, not included in the manuscript document. Cite figures consecutively, as they appear in the text, with Arabic numbers (Fig. 1, Fig. 2, Fig. 3, etc.). Each figure must be assigned a title, as well as a legend. Legends should appear on a separate page, not with each figure. The **Legend Page** is to be numbered in sequence after the last page of the references list. Figures should be professionally drawn, as sharp black-and-white or color photographs. If photographs of persons are used, either the subjects must not be identifiable, or their pictures must be accompanied by written permission to use them.

3. References

References in the text, tables and legends should be identified by Arabic numerals in parentheses. Number references consecutively in the order in which they are first mentioned in the text. The *Vancouver System* of referencing should be used. List each author's last name and initials; full first names are not included. List all authors, but if the number exceeds six, give the first six followed by „et al.” National journals, which are not indexed in *Index Medicus*, should be abbreviated according to the style in the *List of Abbreviated Titles of Yugoslav Serial Publications* available on <http://vbsw.vbs.rs>. For further information please visit www.ICMJE.org.

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.

- Open access: Every article published in the **Serbian Journal of Dermatology and Venereology** will immediately be accessible on www.udvs.org to everyone at no charge.

For further information please contact the Editorial Office (Tel: +381 21/484 35 62) or visit our web site: www.udvs.org.

CIP – Каталогизacija y publikaciji
Народна библиотека Србије, Београд

616.5(497.11)

SERBIAN Journal of Dermatology and
Venerology / editor-in-chief Marina
Jovanović. - Vol. 1, no. 1 (january 2009)-
. - Belgrade (Pasterova 2) : The Serbian
Association of Dermatovenereologists, 2009-
(Beograd : Zlatni presek). - 30 cm

Tromesečno
ISSN 1821-0902 = Serbian Journal of
Dermatology and Venerology
COBISS.SR-ID 156525836



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Cover figure: Christ Healing Ten Lepers, Christ's Miracles, XIVth century, The monastery Visoki Dečani, Serbia, Kosovo

**Published by the
Serbian Association of Dermatovenereologists**