

Analysis of pediatric dermatology inpatient consultations in a pediatric teaching hospital

Fatma S. Afsar, M.D.^{a,b}

ABSTRACT

Introduction. Although skin diseases are associated with low rate of hospitalization, dermatological manifestations are frequent in hospitalized patients. The aim of the study was to describe the inpatient dermatological consultations in a pediatric teaching hospital.

Population and Methods. Recorded data from inpatient pediatric dermatology consultation requests on a total of 539 consecutive inpatients (aged 0-18 years) from January 2004 to April 2010 were analyzed for consult diagnosis, dermatological disease group, primary diagnosis, requesting department, diagnostic pattern, treatment modality and referral to another department.

Results. Of the 539 inpatients, 310 (57.51%) were males and 229 (42.49%) were females. The most frequent requesting department was general pediatrics (37.5%) followed by oncology (15.6%) and pediatric surgery (11.1%). Most of the patients (32.1%) had been hospitalized for dermatological or related disease followed by acute lymphoblastic leukemia (4.1%), chronic renal failure (2.6%), bronchopneumonia (2.6%) and epilepsy (2.4%). Allergic skin diseases (47.1%) were the leading group of dermatoses, which were followed by infectious diseases (14.7%), and systemic diseases with cutaneous manifestations (10.2%). Atopic dermatitis (7.4%) and unclassified eczema (7.4%) were the most frequent dermatoses followed by papular urticaria (5.4%). Most of the patients (80.0%) had diagnosis on clinical basis, whereas skin biopsy was performed in 15.9% and laboratory investigation in 4.1% of the patients. Local treatment was applied to 50.8% of the patients, systemic treatment to 5.8%, local and systemic treatment together to 31.0% while no treatment was given to 11.1%. Only 1.9% of the patients were referred to another department.

Conclusions. This study provided important data on the spectrum of skin disorders and their management in pediatric inpatients from the consultation perspective in a pediatric teaching hospital with multispecialty clinics.

Key words: consultation, inpatients, pediatrics, dermatology.

<http://dx.doi.org/10.5546/aap.2017.eng.e377>

To cite: Afsar FS. Analysis of pediatric dermatology inpatient consultations in a pediatric teaching hospital. *Arch Argent Pediatr* 2017;115(6):e377-e384.

INTRODUCTION

Majority of dermatological practice is done in an outpatient setting, but there are some conditions where children have to be hospitalized for skin disease or secondary systemic illness.^{1,2} The pediatricians are usually the first contact with the patients. After hospitalization referrals are given to different departments.³

Although cutaneous complaints contribute about one-third of all consultations in pediatric practice, there are only a few studies describing the inpatient consultation requests in pediatric dermatology (PD) and their effects on inpatient management.^{1,3-7} The aim of this study was to describe the PD inpatient consultations in a pediatric teaching hospital.

POPULATION AND METHODS

Five hundred thirty nine consecutive requests for PD inpatient consultation from January 2004 to April 2010 in Dr. Behcet Uz Children's Hospital were retrospectively evaluated for final dermatological consult diagnosis, dermatological disease group, primary diagnosis for hospital admission, requesting department, diagnostic procedure, treatment modality, sort of infection if present and need for another consultation to another department. The institution is a pediatric teaching hospital with 368 beds making it one of the biggest pediatric medical centers in Turkey since it was established in 1947.

The patients were divided into five different age groups: infant (0-2 years); preschool children (3-5 years); primary school children (6-10 years); preadolescent (11-12 years); and adolescent (13-18 years).

All patients were seen by the

- a. Atatürk Research and Training Hospital, Department of Dermatology, Izmir, Turkey.
- b. Dr. Behcet Uz Children's Hospital, Department of Dermatology, Izmir, Turkey.

E-mail address:
Fatma S. Afsar, M.D.:
suleafsar@hotmail.com

Funding:
None.

Conflict of interest:
None.

Received: 9-27-2016
Accepted: 2-6-2017

author in the same day of the request within a few hours. The final consult diagnoses and primary diagnoses for hospital admission were recorded. The dermatological disease groups were determined partly based on the *Textbook of Pediatric Dermatology*.⁸ The dermatological diagnoses that were not distinctively under a disease group were categorized as miscellaneous. Diagnoses were based on clinical features, skin biopsy and relevant laboratory investigations.

All data collected were analyzed using the descriptive statistics (SPSS version 16.0 Chicago, IL, USA).

RESULTS

Among the total of 539 pediatric inpatients for whom PD consultation was requested, 310 (57.51%) were males and 229 (42.49%) were females with a mean age of 5.32 (+ 4.74) ranging from 0 to 18 years (male:female ratio 1.3:1).

TABLE 1. The most frequent 10 skin diseases established in all pediatric dermatology inpatient consultations

Skin diseases	Inpatients (n)	(% within all consultations)
Atopic dermatitis	40	(7.4%)
Unclassified eczema	40	(7.4%)
Papular urticarial	29	(5.4%)
Irritant contact dermatitis	28	(5.2%)
Henoch Schönlein vasculitis	26	(4.8%)
Diaper dermatitis	24	(4.5%)
Seborrheic dermatitis	20	(3.7%)
Maculopapular drug eruption	18	(3.3%)
Pyoderma	17	(3.2%)
Urticaria	16	(3.0%)

TABLE 2. The most frequent 12 primary reasons (diagnoses) for hospital admission in all pediatric dermatology inpatient consultations

Primary reason for hospital admission	Inpatients (n)	(% within all consultations)
Dermatologic symptom or related disease	173	(32.1%)
Unknown	96	(17.8%)
Acute lymphoblastic leukemia	22	(4.1%)
Chronic renal failure	14	(2.6%)
Bronchopneumonia	14	(2.6%)
Epilepsy	13	(2.4%)
Acute myeloid leukemia	10	(2.2%)
Aganglionic megacolon	8	(1.9%)
Septicemia	7	(1.5%)
Arthritis	7	(1.3%)
Metabolic disease	7	(1.3%)
Thalassemia major	7	(1.3%)

Two hundred fifteen (39.9%) of the patients were infants, 91 (16.9%) were preschool children, 130 (24.1%) were primary school children, 41 (7.6%) were preadolescents, and 62 (11.5%) were adolescents.

A total of 112 skin diseases were observed in 539 pediatric inpatients, which were categorized under 10 dermatological skin disease groups (see Annex). Allergic skin diseases established in 254 (47.1%) inpatients was the leading group of dermatoses followed by infectious skin diseases in 79 (14.7%) and systemic disorders with cutaneous manifestations in 55 (10.2%). Atopic dermatitis (AD) established in 40 (7.4%) inpatients and unclassified eczema in 40 (7.4%) were the most common dermatoses followed by papular urticaria in 29 (5.4%) and irritant contact dermatitis in 28 (5.2%). The frequencies of cutaneous viral infections and bacterial infections were equal, each in 32 (5.9%) inpatients followed by fungal infections in 12 (2.2%) inpatients and parasitic infections in 3 (0.6%) inpatients. The most frequent 10 skin diseases established in all pediatric inpatients are listed in *Table 1*.

A total of 96 diseases were defined as primary diagnosis for hospital admission including dermatological symptom or related disease in 539 pediatric inpatients. Dermatological symptom or related disease was the leading primary reason for hospital admission for 173 (32.1%) inpatients followed by lymphoblastic leukemia for 22 (4.1%), chronic renal failure for 14 (2.6%) and bronchopneumonia for 14 (2.6%). The primary diagnosis was not specified for 96 (17.8%) inpatients in the consultation request forms. The most frequent 12 primary diagnoses for hospital admission in all PD inpatient consultations are listed in *Table 2*.

TABLE 3. Distribution of pediatric dermatology inpatient consultations by requesting departments

Requesting department	Inpatients (n)	(%)
General Pediatrics	202	(37.5%)
Hematology-Oncology	98	(18.1%)
Pediatric surgery	60	(11.1%)
Newborn Unit	49	(9.1%)
Emergency Department	44	(8.2%)
Infectious Diseases	44	(8.2%)
Cardiology	16	(2.9%)
Hemodialysis Unit	10	(1.9%)
Orthopedics and Traumatology	7	(1.3%)
Intensive Care Unit	6	(1.1%)
Plastic and Reconstructive Surgery	3	(0.6%)
Total	539	(100.0%)

The most common requesting department was general pediatrics (GP) for 202 (37.5%) consultations followed by Hematology-Oncology (H-O) for 98 (18.1%), pediatric surgery (PS) for 60 (11.1%) and newborn unit (NU) for 49 (9.1%). Distribution of PD inpatient consultations by the requesting departments are summarized in *Table 3*.

Of the 539 consultations, 431 (80.0%) diagnoses were based on clinical assessment. The distribution of diagnostic procedures for consultations are listed in *Table 4*. Topical treatment alone was the leading treatment pattern applied to 274 (50.8%) inpatients, followed by systemic treatment together with topical treatment applied to 167 (31.0%) inpatients, systemic treatment alone applied to 31 (5.8%) inpatients, other treatments (percutaneous abscess drainage, curettage for removal of skin lesions, medical dressing, etc.) alone applied to four (0.7%) inpatients, systemic treatment and other treatments together applied to two (0.3%) inpatients, and topical treatment and other treatments (percutaneous abscess drainage, curettage for removal of skin lesions, medical dressing, etc.) together applied to one (0.2%) inpatient. Sixty (11.1%) inpatients had no treatment. Ten (1.8%) inpatients were referred to another department for finalization of the consultation (*Table 5*). The reasons for referrals were surgical excision in seven (7/10) inpatients, further investigation for systemic involvement in one (1/10) patient, and other reasons in two (2/10) inpatients.

Table 4. Diagnostic procedures for the pediatric dermatology inpatient consultations

Type of diagnostic procedure	Inpatients (n)	(%)
Clinical diagnosis	431	(80.0%)
Skin biopsy	86	(15.9%)
Laboratory investigation	22	(4.1%)
Total	539	(100.0%)

TABLE 5. The departments to which referrals were made for finalization of the consultations

Departments	Inpatients (n)	(%)
Plastic and Reconstructive Surgery	4	(0.7%)
Otorhinolaryngology	2	(0.4%)
Orthopedics and Traumatology	2	(0.4%)
Pediatric surgery	1	(0.2%)
Pediatric neurology	1	(0.2%)
Total	10	(100.0%)

DISCUSSION

Skin related problems may be present at the time of hospitalization as a primary skin disease or they may develop or exacerbate during the stay in hospital, requiring dermatology consultation.³ Common dermatologic diseases are often not recognized or they are misdiagnosed by non-dermatologists.¹ Thus, inpatient consultation is the ideal environment to capture the different perceptions that other physicians have of patients and dermatologists.² Although it has been suggested that the role of dermatologists as consultants for pediatric inpatients is similar to their role in outpatient consultations, reasons for dermatology consultation and the extent to which it contributes to cutaneous care are not well documented.^{7,9}

In this study of PD inpatient consultations, there was a slight male preponderance with a male:female ratio of 1.3:1 which was compatible with other similar studies.^{3,5} Male gender has been described as a risk factor associated with hospitalization of children.^{10,11} Inpatient dermatology consultation was most frequently requested for the infantile group consistent with the results of other studies.^{3,5} The great predominance of hospitalizations during the first years of life shows that the immunological immaturity of those children and their anatomical characteristics put them at a higher risk of having a severe case disease and getting sick in general. Besides, considering the growing importance of perinatal diseases as causes of hospitalization it is natural that children younger than one year old are the most hospitalized group.¹⁰

Allergic skin diseases were the leading group of dermatoses followed by infectious skin diseases and systemic diseases with cutaneous manifestations. Although allergic skin diseases and infectious skin diseases constitute the largest number of diagnoses in outpatient PD, systemic diseases with cutaneous manifestations are responsible for a much less number of patients.¹² This shows us that systemic diseases with cutaneous manifestations are rare in childhood, but if present they are really serious and sometimes life-threatening and hospitalization is necessary. Another study had found that the most common diagnostic groups were diseases of the skin and subcutaneous tissue and infections and parasitic diseases.⁷

Proportional to the fact of allergic skin diseases, AD and unclassified eczema were the most frequent dermatoses followed by

popular urticaria and irritant contact dermatitis. Eczemas, including AD, have a higher prevalence in developed countries, being influenced by socioeconomic and environmental factors.¹³ It should be considered that prevalence of AD in children ranges from 15% to 20% and it was also the most frequently diagnosed disorder in outpatient PD series.^{12,14}

Papular urticaria which was a common problem for pediatric inpatients had been reported to contribute to 5.27% of pediatric dermatoses.¹⁵ It may be frequent due to fact that most of the pediatric inpatients come from rural or semirural areas.¹² They may also have it while staying in the hospital. Irritant contact dermatitis was the other frequent consult diagnosis in pediatric inpatients. Sweating, detergents, soaps used in vigorous washing of patients, antiseptics in general and specifically in surgical washing preparations, dressing occlusion, bed confinement, and monitoring with catheters or pressure tubes are factors that together can cause contact dermatitis during hospitalization.²

In the second leading disease group, infectious diseases, bacterial and viral infections were equally predominant. They were followed by fungal infections and a very small number of parasitic infections. Cutaneous mycobacterial infection was not seen in any of the pediatric inpatients. Pyoderma was the leading diagnosis in this group, followed by herpes simplex infection, impetigo, tinea capitis, verrucae, and varicella infection. This high frequency of infections in inpatients were explained by the immunosuppression of some patients and the presentation of skin infections as a common reason for patient admission.^{3,15,16} The cases of neonatal varicella, staphylococcal scalded skin syndrome, extensive bullous impetigo, congenital cutaneous candidiasis, cellulitis, necrotizing fasciitis, abscess which were the primary dermatological cases required hospitalization and regular monitoring both by the dermatologist and pediatrician in another study. Other skin infections were co-existing along with primary systemic complaints.³

One of the most challenging and rewarding aspects of inpatient dermatology consultation is the diagnosis of systemic disorders with cutaneous findings. The skin changes may be the first sign of the underlying condition, and rapid identification can have a significant impact and sometimes be life-saving.¹⁷ In this study, Henoch Schönlein vasculitis was the fifth most frequent

diagnosis among all diagnoses, but other systemic disorders with cutaneous manifestations such as collagen vascular diseases, purpura fulminans or Behcet's disease were seen in minority of pediatric inpatients. Another common indication for PD referral was reported to be drug eruptions.⁶ Maculopapular drug eruption was among the first ten leading diagnoses, while fixed drug eruption was seen in a lower frequency in this study. These reactions can be explained by the large amounts of drugs received by inpatients during hospitalization and dermatology consultation is helpful in identifying the most likely responsible medication.^{5,16}

Genodermatoses were the fourth most commonly diagnosed disease group in which epidermolysis bullosa was the most frequent one followed by ichthyoses probably due to frequent consanguineous marriages. The disease group 'miscellaneous' came after the genodermatoses in frequency. In another study of PD inpatient consultations, over 40% of diagnoses were categorized as 'miscellaneous' emphasizing the need to 'expect the unexpected'.⁵ The rate of miscellaneous group was low in this series.

Although diseases of hair, nails, sebaceous and eccrine glands were not very frequent among pediatric inpatients, nail dystrophy, acne, alopecia areata and scarring alopecia were the most frequent diagnoses. Most of these diagnoses may already present and they may be noticed during hospitalization. The rate of this group has been reported to be twice as much in PD outpatients.¹²

The group of 'erythemas and blistering diseases' was seventh in frequency in this series, but this rate was quite high when it was compared with the outpatient practice.¹² This condition shows us that the disease group is quite serious and hospitalization is necessary for pediatric age groups. Erythema multiforme was the leading diagnosis followed by erythroderma and erythema nodosum in this group. Disorders of pigmentation/melanocyte and epidermal nevi are mostly handled in outpatient settings and their rate was quite low in inpatients. Vitiligo, congenital nevus and postinflammatory hypopigmentation were the most common diagnoses which were possibly present in inpatients before hospitalization.

Papulosquamous disorders constituted a small group in the inpatient consultation diagnoses. Psoriasis was not a common problem among pediatric inpatients, but its rate was close to the rates of reference outpatient series.^{12,14} However,

it was the third most frequent diagnosis among pediatric inpatients in another study.⁶ The relative low rates of vascular and lymphatic anomalies, and especially hemangiomas in this study show us that these disorders are being handled in the outpatient setting. In contrast, vascular anomalies were reported to be one of the two most common diagnoses when hospitalization was primarily for skin related disease in another study of PD inpatient consultations.⁵

GP was the most frequent requesting department followed by H-O, PS and NU. The substantial number of requests by the departments of GP and PS correlates with the number of patients admitted. The heaviness of consultations from H-O and NU may be due to fact that most of their patients should be followed in the hospital setting for their primary complaints. GP is the department from which the maximum number of consult requests were made in other studies.^{3,5,6} Also, GP was reported to be followed by pediatric H-O, pediatric intensive care unit, neonatology, child psychiatry, otorhinolaryngology and PS as the main consult-requesting services in descending order for the consultation request in one of those studies.⁶

Unlike other previous studies, the inpatients were evaluated for primary hospital admission reasons and it was found that almost one-third of them had been hospitalized for a dermatological or related disorder by the pediatricians. The following most frequent primary diagnoses were acute lymphoblastic leukemia, chronic renal failure, bronchopneumonia and epilepsy. The primary diagnoses were not defined in some of the consultation request forms. Those missing primary diagnoses may be related or unrelated to dermatological disorders.

Dermatologists are often able to make a clinical diagnosis without additional investigations which are sometimes ordered by other physicians.¹⁸ A great majority of diagnoses were found to be established on clinical basis in this series, while skin biopsy was performed in 15.9% of the inpatients. This rate was in concordance with other PD inpatient consultation series, but it was quite superior than reference outpatient series.^{3,5,12,14} This shows us that skin biopsy is much more essential for establishing a final and absolute diagnosis for inpatient consultations. The need for additional laboratory investigations was not more than the need in the outpatient setting.¹²

Data describing the management of pediatric inpatients for whom dermatology consultation

was requested are limited.⁶ In this study, half of the pediatric inpatients were treated by topical treatments pointing out that topical treatment was the mainstay treatment for the inpatients similar to PD outpatients.^{12,14} Topical treatment was followed by topical and systemic treatment together, and medical advice or reassurance was given to nearly one-tenth of the inpatients. The overall rate of referral to another department for the finalization of consultations was as low as 1.8%. A great number of those inpatients were proposed to be referred to surgical departments such as plastic and reconstructive surgery and otorhinolaryngology, mainly for excisional surgery. It can be inferred that skin problems of the pediatric inpatients are easily resolved within PD consultations without a need for further consultations except for specific surgical procedures.

Additionally, the need for dermatology education of pediatricians is obvious. Most of the dermatological diseases presented by the inpatients were not the cause of hospitalization except the drug eruptions. Papular urticaria and contact dermatitis may also emerge during hospitalization. Training of pediatric dermatologists and pediatricians focus on accurate recognition, diagnosis, and management of these common skin diseases,¹⁹ Thus, PD consultation is an opportunity to acquire dermatological notion for them and pediatric dermatologist plays an important role in the diagnosis and treatment of pediatric skin disorders. In some programs, an inpatient consultation may be the only exposure a resident has to dermatology.¹⁷ The limitations of this study were its retrospective design which could result in incomplete data and poor documentation of the clinical symptoms and involvement of the inpatients who were evaluated by a single dermatologist.

CONCLUSIONS

A diverse spectrum of skin disorders established in PD inpatient consultations points out that failure to identify some of the inpatient cases can be quite serious. However, some of the inpatients may have skin disorders that can be handled in the outpatient practice. This study provided information that PD inpatient consultation has an important role in the management of inpatients in a pediatric teaching hospital with multispecialty clinics. ■

REFERENCES

1. Falanga V, Schachner LA, Rae V, et al. Dermatologic consultations in the hospital setting. *Arch Dermatol* 1994;130(8):1022-5.
2. Peñate Y, Guillermo N, Melwani P, et al. Dermatologists in hospital wards: an 8-year study of dermatology consultations. *Dermatology* 2009;219(3):225-31.
3. Srinivas SM, Hiremagalore R, Venkataramaiah LD, et al. Pediatric dermatology inpatient consultations: a retrospective study. *Indian J Pediatr* 2015;82(6):541-4.
4. Schachner L, Ling NS, Press S. A statistical analysis of a pediatric dermatology clinic. *Pediatr Dermatol* 1983;1(2):157-64.
5. McMahon P, Goddard D, Frieden IJ. Pediatric dermatology inpatient consultations: a retrospective study of 427 cases. *J Am Acad Dermatol* 2013;68(6):926-31.
6. Storan ER, McEvoy MT, Wetter DA, et al. Pediatric hospital dermatology: experience with inpatient and consult services at the Mayo Clinic. *Pediatr Dermatol* 2013;30(6):433-7.
7. Peñate Y, Borrego L, Hernández N, et al. Pediatric dermatology consultations: a retrospective analysis of inpatient consultations referred to the dermatology service. *Pediatr Dermatol* 2012;29(1):115-8.
8. Harper J, Oranje A, Prose NS. Textbook of Pediatric Dermatology. 2nd ed. Malden: Blackwell Publishing; 2006.
9. Kirsner RS, Yang DG, Kerdel FA. Dermatologic disease accounts for a large number of hospital admissions annually. *J Am Acad Dermatol* 1999;41(6):970-3.
10. Ferrer AP, Sucupira AC, Grisi SJ. Causes of hospitalization among children ages zero to nine years old in the city of São Paulo, Brazil. *Clinics (Sao Paulo)* 2010;65(1):35-44.
11. Castro MSM, Travassos C, Carvalho MS. Analysis of hospital admissions associated factors in Brazil. *Ciêñ Saúde Colet* 2002;7(4):795-811.
12. Afsar FS. Pediatric dermatology in practice: spectrum of skin diseases and approach to patients at a Turkish pediatric dermatology center. *Cutan Ocul Toxicol* 2011;30(2):138-46.
13. Williams HC. Epidemiology of skin diseases. In: Burns DA, Breatnach SM, Cox NH, eds. *Rook's Textbook of Dermatology*. 7th ed Oxford: Blackwell Science; 2004.p.161-2.
14. Wenk C, Itin PH. Epidemiology of pediatric dermatology and allergology in the region of Aargau, Switzerland. *Pediatr Dermatol* 2003;20(6):482-7.
15. Karthikeyan K, Thappa DM, Jeevankumar B. Pattern of pediatric dermatoses in a referral center in South India. *Indian Pediatr* 2004;41(4):373-7.
16. Mancusi S, Festa Neto C. Inpatient dermatological consultations in a university hospital. *Clinics (Sao Paulo)* 2010;65(9):851-5.
17. Nahass GT. Inpatient dermatology consultation. *Dermatol Clin* 2000;18(3):533-42.
18. Itin PH. Dermatologic consultations in the hospital ward: the skin, interdisciplinary organ. *Dermatology* 2009;219(3):193-4.
19. Ben Saif GA, AlShebab SA. Pattern of childhood dermatoses at a teaching hospital of Saudi Arabia. *Int J Health Sci (Qassim)* 2008;2(2):63-74.

ANNEX
Groups of skin diseases and consult diagnoses and their frequencies
in pediatric dermatology inpatient consultations

Groups of skin diseases	Inpatients (n)	(%)	Groups of skin diseases	Inpatients (n)	(%)
Allergic skin diseases	254	(47.1%)	Rothmund-Thomson syndrome	2	(0.4%)
Atopic dermatitis	40	(7.4%)	Tuberous sclerosis	2	(0.4%)
Unclassified eczema	40	(7.4%)	Incontinentia pigmenti	2	(0.4%)
Papular urticarial	29	(5.4%)	Papillon Lefèvre syndrome	1	(0.4%)
Irritant contact dermatitis	28	(5.2%)	Miscellaneous	33	(6.1%)
Diaper dermatitis	24	(4.5%)	Erythema toxicum neonatorum	4	(0.7%)
Seborrheic dermatitis	20	(3.7%)	Mastocytosis	3	(0.5%)
Maculopapular drug eruption	18	(3.3%)	Aphtous stomatitis	3	(0.5%)
Urticaria	16	(3.0%)	Leukoplakia	3	(0.5%)
Allergic contact dermatitis	11	(2.0%)	Decubitus ulcer	3	(0.5%)
Xeroderma	6	(1.1%)	Neurodegenerative disease	1	(0.2%)
Pityriasis alba	5	(0.9%)	Juvenile xanthogranuloma	1	(0.2%)
Fixed drug eruption	5	(0.9%)	Langerhans cell histiocytosis	1	(0.2%)
Nummular eczema	3	(0.5%)	Pigmented purpuric dermatosis	1	(0.2%)
Dyshidrotic eczema	2	(0.4%)	Keloid scar	1	(0.2%)
Perioral dermatitis	2	(0.4%)	Hypertrophic scar	1	(0.2%)
Phototoxic contact dermatitis	2	(0.4%)	Striae	1	(0.2%)
Juvenile plantar dermatosis	1	(0.2%)	Calcinosis cutis	1	(0.2%)
Cheilitis	1	(0.2%)	Foreign body granuloma	1	(0.2%)
Solar dermatitis	1	(0.1%)	Subcutaneous tumor	1	(0.2%)
Infectious diseases	79	(14.7%)	Gingivitis	1	(0.2%)
Pyoderma (unclassified)	17	(3.2%)	Dermatitis artefacta	1	(0.2%)
Herpes simplex virus infection	12	(2.3%)	Sclerema neonatorum	1	(0.2%)
Impetigo	9	(1.6%)	Periungual fibroma	1	(0.2%)
Varicella	7	(1.3%)	Sweet's syndrome	1	(0.2%)
Tinea capitis	7	(1.3%)	Epidermal cyst	1	(0.2%)
Viral wart	7	(1.3%)	Transient pustular melanosis	1	(0.2%)
Cellulitis	4	(0.7%)	Diseases of the hair, nails,		
Viral exanthem caused by enteroviruses	3	(0.5%)	sebaceous and eccrine glands	24	(4.4%)
Tinea corporis	2	(0.4%)	Nail dystrophy	5	(0.9%)
Tinea pedis	2	(0.4%)	Acne	4	(0.7%)
Molluscum contagiosum	2	(0.4%)	Scarring alopecia	4	(0.7%)
Candidiasis	1	(0.2%)	Alopecia areata	3	(0.5%)
Scabies	1	(0.2%)	Miliaria	2	(0.4%)
Pediculosis capitis	1	(0.2%)	Pachyonychia congénita	2	(0.4%)
Cutaneous leishmaniasis	1	(0.2%)	Telogen effluvium	1	(0.2%)
Herpes zoster	1	(0.2%)	Infantile acne	1	(0.2%)
Echtyma	1	(0.2%)	Hair shaft abnormality	1	(0.2%)
Staphylococcal scalded skin syndrome	1	(0.2%)	Hypertrichosis	1	(0.2%)
Systemic disorders with			Erythemas and blistering disorders	21	(3.9%)
cutaneous manifestations	55	(10.2%)	Erythema multiforme	8	(1.5%)
Henoch-Schönlein vasculitis	26	(4.8%)	Erythema nodosum	4	(0.7%)
Petechia/purpura	9	(1.6%)	Erythroderma	4	(0.7%)
Urticarial vasculitis	7	(1.3%)	Stevens-Johnson syndrome	2	(0.4%)
Purpura fulminans	3	(0.5%)	Linear IgA dermatosis	2	(0.4%)
Job's syndrome	2	(0.4%)	Erythema annulare centrifugum	1	(0.2%)
Kawasaki's disease	2	(0.4%)	Disorders of pigmentation/melanocyte		
Livedo reticularis	2	(0.4%)	and epidermal naevi	17	(3.2%)
Behcet's disease	2	(0.4%)	Vitiligo	3	(0.5%)
Dermatomyositis	1	(0.2%)	Congenital melanocytic nevus	3	(0.5%)
Localized scleroderma	1	(0.2%)	Postinflammatory hypopigmentation	2	(0.4%)
Genodermatoses	34	(6.3%)	Linear epidermal nevus	2	(0.4%)
Epidermolysis bullosa	12	(2.2%)	Pigmentary mosaicism	2	(0.4%)
Ichthyosis	7	(1.3%)	Nevus depigmentosus	1	(0.2%)
Palmoplantar keratoderma	3	(0.5%)	Acquired melanocytic nevus	1	(0.2%)
Collodion baby	3	(0.5%)	Postinflammatory hyperpigmentation	1	(0.2%)
Ectodermal dysplasia	2	(0.4%)	Freckling (ephelides)	1	(0.2%)

Groups of skin diseases	Inpatients (n)	(%)	Groups of skin diseases	Inpatients (n)	(%)
Halo nevus	1	(0.2%)	Pityriasis rosea	1	(0.2%)
Papulosquamous disorders	15	(2.8%)	Lichen planus	1	(0.2%)
Psoriasis	8	(1.5%)	Vascular and lymphatic anomalies	7	(1.3%)
Pityriasis lichenoides	4	(0.7%)	Port-wine stain	5	(0.9%)
Pityriasis rubra pilaris	1	(0.2%)	Hemangioma	2	(0.4%)
			Total	539	(100%)