

# Dermatologists are Essential for Quality of Care in the General Practice of Medicine

J.D. Bos, M.E. Schram and J.R. Mekkes

Department of Dermatology. Academic Medical Center. University of Amsterdam. The Netherlands.

**Abstract.** Dermatology is an increasingly growing specialty with several subspecialties that frequently overlap with other disciplines. Dedication to specific areas varies widely between countries, even within the European Union. The lack of uniform criteria that regulate the practice of dermatology and its subspecialties has a negative impact on the distribution of resources. Consequently, this may impair adequate patient care as access to dermatologists, who are the best trained physicians to recognize and treat skin disorders, may be delayed or unavailable. Not uncommonly, especially in the hospital setting, many specialists are consulted for a skin condition before a referral is made to a dermatologist. In this article, through a case series from daily practice, we illustrate the need for dermatologists to be recognized as the most suitable specialists to diagnose and treat skin diseases. A prompt referral is probably more cost-effective than any other measure, reducing patient morbidity and, in some instances, it can also be life-saving. Another issue that merits consideration is the reimbursement of selected, non-medicated pharmaceuticals, that are medically indicated for some patients with serious dermatological disorders.

**Key words:** dermatology subspecialties, referral, reimbursement, skin care products.

## LOS DERMATÓLOGOS SON ESENCIALES PARA LA ATENCIÓN DE CALIDAD EN LA PRÁCTICA GENERAL DE LA MEDICINA

**Resumen.** La dermatología es una especialidad en continuo crecimiento con varias subespecialidades que se solapan con otras disciplinas. La dedicación a determinadas áreas varía enormemente entre los países, incluso dentro de la Unión Europea. La falta de criterios que regulan la práctica de la dermatología y sus subespecialidades tiene un impacto desfavorable en la asignación de los recursos. Por consiguiente, esto puede dificultar una adecuada atención a los pacientes, dado que el acceso a los dermatólogos, que son los médicos mejor preparados para reconocer y tratar los trastornos cutáneos, puede verse retrasado o no estar disponible. No es infrecuente, especialmente en el ámbito hospitalario, que se consulte a varios especialistas por una afección cutánea antes que al dermatólogo. En este artículo, a través de una serie de casos de la práctica diaria, ilustramos la necesidad de que los dermatólogos sean reconocidos como los especialistas más idóneos para diagnosticar y tratar las enfermedades cutáneas. Una pronta derivación al dermatólogo es probablemente la medida con mejor relación coste-beneficio, reduciendo la morbilidad del paciente y siendo, en algunas circunstancias, una medida que puede salvar vidas. Otra cuestión que merece consideración es la financiación de productos sanitarios, seleccionados, que tienen una indicación médica en algunos pacientes con enfermedades cutáneas graves.

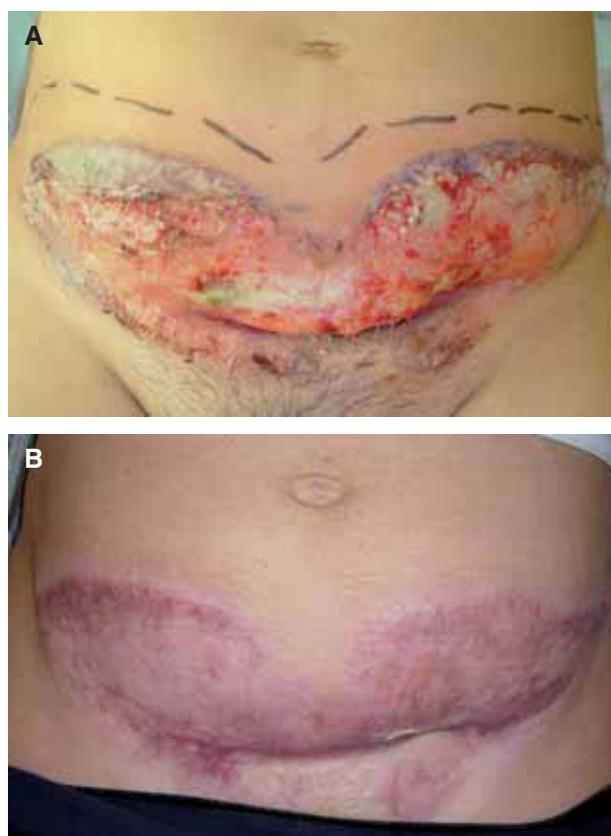
**Palabras clave:** subespecialidades de dermatología, derivación, financiación, productos para el cuidado de la piel.

---

Correspondence:  
Jan D. Bos.  
Professor and Chairman.  
Department of Dermatology A0-235.  
Academic Medical Center.  
University of Amsterdam.  
P.O.Box 22700.  
1100 DE Amsterdam.  
The Netherlands.  
j.d.bos@amc.uva.nl

## Introduction

There is no uniformity in the way dermatology is practised in the different nations of the world. This also applies to countries in the European Union (EU). For example, surgical dermatology and phlebology are important subspecialties in daily practice in many countries; while in other nations specialists from plastic and vascular surgery have



**Figure 1.** Pyoderma gangrenosum before (A) and after (B) treatment with oral corticosteroids. Before treatment, the ulcers have undermined, irregular, typically purple margins.

difficulty accepting dermatologists to act in these areas. Venereology is a distinct specialty in the United Kingdom (UK: genitourinary medicine), while it is part of dermatology in most other EU countries, sometimes even including HIV and AIDS diagnosis and treatment.

Metastatic melanoma treatment is practised by dermatologists in only a few nations including in-patient hospitalization; in most it is in the hands of internal medicine. Cosmetic dermatology, a borderline but financially very profitable subspecialty, used to be a major issue of interest in the United States of America (USA). It is now also rising in many EU countries, especially in France and Italy.

Organizations such as the European Dermatology Forum (EDF), the European Academy of Dermatology and Venereology (EADV), and the European Union of Medical Specialists (UEMS) try to introduce more uniformity in Europe. The main difficulty here is finding a balance between health care economy, allocation of resources, and national interests which prohibit consistent distribution of funds. Lack of uniformity here leads to delay in development of diagnostic and treatment guidelines in disputed areas of the specialties.

Within the EU, the ratio of dermatologists to the population is varying widely. In some countries, there is a relative surplus of dermatologists. Patients can directly consult us within a few days, while in other nations, dermatologists are sparse, and consulting them is only allowed when the general practitioner/family doctor is referring them. And then it can still take up to a year before a dermatologist can actually be seen, depending on indication. For instance, a patient with a leg ulcer may have to wait that long before a specialist is able to see and treat such a patient.

A common characteristic of dermatology as a specialty is that it is generally and often deeply underestimated as an important factor in the quality of care. Health authorities (government, hospital boards, and insurers) are to blame, but the medical specialists themselves perhaps every now and then as well. In this contribution, using cases from daily practice, it is exemplified where health authorities fail, or where other doctors do not succeed by hesitating to consult us, or where we as dermatologists fail to provide sufficient dermatological care. We come to a set of conclusions which contain recommendations for the future reorganization and anchoring of dermatology in the field of medicine.

## A woman with Extreme skin Ulceration after Caesarean Section

### Case

In a large academic hospital, a 31-year-old patient without significant medical history had to undergo caesarean section to give birth to her child. The incision did not heal normally and after 5 days it was decided to re-excise it, suspecting it to be necrotizing fasciitis. Ulcerations along the new margins continued to extend. Systemic therapy with sophisticated antibiotics did not result in remission of the skin disease. Ulcers grew up to more than 10 cm at both sides of the original iatrogenic lesion of the skin. The lower part of her belly had in fact become one large ulcer (fig. 1A). Many specialties were consulted (general surgery, plastic surgery, internal medicine, haematology, bacteriology, tropical medicine, wound care nurses). Only after 21 days, a dermatologist was consulted. He noticed the purple colour of the ulcer borders, its undermined and irregular aspect, and made a clinical diagnosis of pyoderma gangrenosum. This ill-understood dermatological entity may be provoked by skin injury, a phenomenon known as 'pathergy'. Treatment was initiated with prednisone, an old and cheap drug. A remission was seen within several days with complete healing in 8 weeks (fig. 1B). Further investigations did not reveal gastrointestinal disease, which may often be associated with pyoderma gangrenosum.

## Comment

This is a case of “referral delay”, probably caused by the relative invisibility of dermatology in a large hospital. Dedicated specialists in dermatology lose motivation in many (but not all) hospitals, all over the world, and certainly in Europe, due to the lack of needed facilities that are denied by hospital directors. They are marginalized by continuous reallocation of resources, making it unattractive to seek a career in larger hospitals. As a result, dermatologists are forced to go into private practice and into private clinics, dismembering themselves from the medical mainstream, and, at the same time, withholding hospitalized or hospital outpatients from their knowledge.

## Implications

Governments, insurance providers and hospital directors are responsible for maintaining a minimal level of expertise, also in dermatological services. Ignoring that first of all, this harms patients, their families and relatives, as exemplified here. In the end, health care regulators will prove to be wrong when they marginalize dermatology from their range of attention. At the same time, specialists in our field harm medicine by escaping into private practice and ignoring the real need of day-to-day dermatology in hospital in- and outpatient practice.

## An Athlete with Itchy Skin Lesions

### Case

A 28-year-old man highly ranked as a soccer player had developed, within a few weeks, seriously itching lesions

distributed over the skin. The physician attached to his club gave a mixture of topical antibiotics, antifungals, and glucocorticoids. That was of no use and a strong topical glucocorticoid in combination with systemic antifungals and antibiotics was tried. Oral antihistamines and oral corticosteroids were also prescribed, all with no effect. In the meantime, he had missed several important matches as he could not play for a period of at least 8 weeks, and the club was harmed by that.

A dermatologist was consulted, who immediately recognized the typical distribution of excoriated and lichenified lesions as being diagnostic of dermatitis herpetiformis, with excoriated lesions on the shoulders, elbows, lower back, and knees (fig. 2). The diagnosis was confirmed by immunohistopathology. Diaminodiphenylsulfone (DDS, an old and cheap drug) 100 mg twice daily was prescribed, with immediate relief in a couple of days. A gluten free diet could diminish the need for DDS to 50 mg every other day during the follow-up period of several months. There were no signs of gluten-sensitive enteropathy, which may be seen in cases of dermatitis herpetiformis, and vice versa.

## Comment

Dermatitis herpetiformis is a relatively rare skin disease. It is very unusual that non-dermatologists recognize the entity. The excoriated, minimally inflammatory lesions are often taken for ‘eczema’, ‘mycosis’, or skin infection, which is often as far as the differential diagnosis by non-dermatologists in erythematous and itchy skin conditions goes. It is evident that the quality of care initially provided here was below standard due to the lack of recognition which is, by definition, only in the hands of those that specialize in



**Figure 2.** Dermatitis herpetiformis of the elbows, with typical excoriated lesions in different stages of healing. Vesicles are only rarely observed.



**Figure 3.** Paraneoplastic plantar hyperkeratosis in a patient with a laryngeal tumor.

it; dermatologists. This is again a typical case of ‘referral delay’, caused by overestimation of dermatological skills by non-dermatologists.

### Implications

Governments, insurance providers, and hospital directors are responsible for maintaining a minimal level of expertise, also in dermatological services, as stated above. To maintain an optimal level, the number of well trained and continuously educated dermatologists should be at a certain minimum level. A good ratio can be estimated to be 1 full-timer for every 50.000 inhabitants. These dermatologists should be stimulated to be connected to hospitals to provide their services for in- and outpatients.

That also implicates maintaining the specialty at the academic level, which is expensive, but a university environment is oxygen for the continuous renewal of a medical specialty. Such an environment is also needed for training students and family physicians, as well as for specialist training and post-specialization continuous education. Not to mention the scientific development of the specialty. That can only and almost exclusively occur in a university environment with resources for basic, translational and applied research.

### A Patient with Thickened Plantar Skin

A 66-year-old male was referred to the dermatologist for therapy resistant hyperkeratosis of the plantar skin (fig. 3).

It was recognized as discomforting but not serious by the general practitioner/family physician, but a referral did take place on the patient’s family initiative.

Palmoplantar hyperkeratosis can be a genetic disorder, but in this patient it was only present for some months. Attempts of his general practitioner to soften the skin with keratolytic ointments and emollients were unsuccessful. In rare cases, the hyperkeratotic disorder can be associated with underlying malignancies. Further examination revealed that the patient had difficulties in swallowing, which was caused by a laryngeal squamous cell carcinoma. His life could be saved by extensive surgery.

### Comment

Paraneoplastic skin diseases are extremely rare. The diagnosis can only be made by specialists that are aware that these entities exist. Early recognition of severe diseases such as malignancies or internal diseases on the basis of skin symptoms may considerably contribute to a patient’s chance of survival. Although there was little ‘referral delay’ here, postponement of dermatological consultation might have resulted in inoperability of the tumor.

### Implications

Patients with skin diseases, even seemingly harmless, should be evaluated at least once by a dermatologist, to make sure that the correct diagnosis is made.

### Dermatology as a Specialty

There is consensus, within the global medical community, that only physicians dedicated to skin diseases will be able to discern the many entities that are out there. But that consensus is not translated in a sufficient number of dermatologists in all countries, and also not into an adequate infrastructure for them to practice their specialty in a hospital environment.

Estimations as to the number of different clinical entities in dermatology vary but at least 1,800 seem to be a reasonable estimate based on our own outpatient list. That is huge and only manageable by individuals making a life career in recognizing, diagnosing, handling, and treating them. Not to mention that each of these many different skin diseases behave differently in each individual affected by one of them. Dermatological disorders can be extremely complex and cannot be handled by those who do not concentrate on them.

Also, for ‘simple’ dermatological problems, like discerning a benign nevus from a melanoma, the trained derma-

tologist performs better than any other physician. This is cost-effective because unnecessary biopsies are prevented, and it may be life-saving if excision is necessary.

General practitioners/family doctors all over the world easily admit that the highest percentages of patients they refer to a medical specialist are to a dermatologist, up to approximately 20% of all their referrals. Good dermatological care should be available without delay. Quick referral and immediate and appropriate action is better for the patient and probably more cost-effective than trying several treatments without a clear diagnosis.

Finally, it is interesting to mention that keratolytic ointments, and other so-called skin maintenance treatments including emollients, bathing oils, and medicated shampoos are no longer part of insurance in many countries. That might be reasonable in otherwise skin-healthy individuals but is discriminating in patients having serious dermatological diseases. It is comparable to issues such as reimbursement of benzodiazepines in sleeping problems and anticonceptives to prevent pregnancy. Rigorous measures excluding all from reimbursement is probably more harmful and less cost-effective as compared to selective reimbursement. Patients with serious dermatological diseases should be reimbursed for their needed use of skin maintenance non-medicated pharmaceuticals and cosmetics. Another obvious example is patients suffering from photosensitivity. There are many photosensitive disorders including porphyrias and ill-defined diseases such as polymorphic skin disease and lupus erythematosus, in which sun blockers are indicated and they should be reimbursed.

## Conclusions

1. Health authorities, insurers, and hospital directors should be aware of the unique quality of dermatologists as being the only medical specialists able to recognize, diagnose and treat the approximately 1800 different clinical entities of the specialty.
2. In order to maintain a sufficient level of dermatological expertise, the number of dermatologists in any country should ideally be approximately 1 full-timer for every 50.000 inhabitants.
3. There should be more uniformity in the way dermatology is practiced, especially with regard to subspecialties such as surgical dermatology, phlebology, cosmetology, complex oncology and venereology. Attempts to reach that goal by the EDF, EADV and UEMS should be supported, because it allows the development of international guidelines.
4. "Delay of referral" to dermatologists is one of the most common negative factors in the quality of care in the general practice of medicine. Dermatology should have a firm basis in any general hospital, allowing adequate consultation by general practitioners and by other specialists, within a reasonable time frame.
5. A negative impulse to dermatological care is that skin care products, logically not reimbursed for healthy people, are also not reimbursed for dermatological patients, impairing their care and increasing costs for specific treatments.
6. Authorities should enable and maintain the necessary facilities for teams of dermatologists to practice dermatology with most of its subspecialties in general hospitals. Smaller subspecialties, for example Mohs micrographic surgery and in-patient treatment, should be enabled and distributed regionally.
7. Dermatology should have a firm basis in all academic medical hospitals, allowing the specialty to further develop scientifically, simultaneously providing the infrastructure for student education and training of new generations of specialists.

### Conflict of interest

Authors have no conflict of interest to declare.

## Recommended references

- Benton EC, Kerr OA, Fisher A, Fraser SJ, McCormack SK, Tidman MJ. The changing face of dermatological practice: 25 years' experience. *Br J Dermatol.* 2008;159:413-8.
- European Dermatology Forum. *Eur J Dermatol.* 2006;16:209-14.
- García-Doval I, Feal C, Rosón E, de la Torre C, Abalde MT, Flórez A, et al. Inpatient dermatology: characteristics of patients and admissions in a Spanish hospital. *J Eur Acad Dermatol Venereol.* 2002;16:334-8.
- Julian CG. Dermatology in general practice. *Br J Dermatol.* 1999;141:518-20.
- Marks R. The public health approach to the burden of common skin diseases in the community. *J Dermatol.* 2001;28:602-5.
- Rogalski C, Paasch U, Simon JC. [Health economic studies in dermatology—review of the literature, evaluation and practical aspects]. *J Dtsch Dermatol Ges.* 2004;2:279-85.
- Tran H, Chen K, Lim AC, Jabbour J, Shumack S. Assessing diagnostic skill in dermatology: a comparison between general practitioners and dermatologists. *Australas J Dermatol.* 2005;46:230-4.
- Williams H, Svensson A, Diepgen T, Naldi L, Coenraads PJ, Elsner P, et al; European Dermato-Epidemiology Network (EDEN). Epidemiology of skin diseases in Europe. *Eur J Dermatol.* 2006;16:212-8.