

## Case study

### **Dermatological emergencies of a University Hospital Center of Rabat, Morocco**

#### **Abstract:**

**Introduction:** Dermatological emergency is defined as any acute dermatological disorder that develops and worsens in less than 5 days.

**Aims of study:** The aim of our study is to identify the main dermatological emergencies consultations, establish a demographic and clinical profile of the reasons for dermatological consultations, and review the various diagnostic and therapeutic difficulties encountered by interns and/or residents.

**Materials & Methods:** We conducted a prospective study in the dermatology department of the Ibn Sina University Hospital in Rabat between June 2022, and May 2023. Excel and Statistical Package for the Social Sciences (SPSS Inc., version 15.0 for Windows) were used for data entry and analysis.

**Results:** 1,321 urgent dermatology consultations were received during this period. The sex ratio was 0.89, and the average age was 45.6 years (01months-95years). The reasons for consultation were: infectious pathologies in 47% (Erysipelas in the lead), inflammatory pathologies in 24%, toxidermia in 7%, autoimmune bullous dermatosis in 4%, tumor pathologies in 3%, and others in 15% of cases. 79 cases (5,9%) were hospitalized as emergencies and while the others (94,1%) only needed an ambulatory care.

**Conclusion:** The pathologies encountered in dermatological emergencies are very diverse dominated by infectious diseases. However, the majority of patients do not require an emergency consultation.

**Keywords:** dermatological emergency, emergency, skin diseases, dermatological consultations

#### **Introduction:**

Although dermatology is generally regarded as an ambulatory clinical practice characterized by non-acute, non-fatal conditions

4% to 12% of all emergency room visits are due to symptoms related to dermatological disorders. (1,2)

This demand for urgent consultation is growing, and may correspond to an acute dermatosis or to a non-urgent dermatosis (in 49-82%) in order to obtain a shorter consultation time. (1,7)

A grading system can help dermatologists and allied medical personnel to triage a patient accordingly. Currently no severity grading for dermatological emergencies is available.(11)

The aim of our study is to identify the main dermatological emergencies consultations and establish a demographic and clinical profile of the reasons for dermatological consultations.

## Materials & Methods:

We conducted a prospective study in the dermatology department of the Ibn Sina University Hospital in Rabat between June 2022, and June 2023. 1321 patients were included by receiving telephone calls via the dermatological emergency number during 24-hour shifts, 7 days a week, then collecting patient information, and this information was transcribed into a "dermatological emergency register".

Excel and Statistical Package for the Social Sciences (SPSS Inc., version 15.0 for Windows) were used for data entry and analysis.

Limitations of study were that pediatric patients have not been taken into consideration as they consult the pediatric department, and the dermatologist was not responsible for emergency triage some patients may be managed by interns.

## Results:

1,321 urgent dermatology consultations were received during this period (4 patients/day), with more patients on Mondays (257 patients) and fewer on weekends (177 patients). 46.8% of consultations were requested in the morning vs. 37.6% in the afternoon and 15.6% in the evening. The sex ratio was 0.89, with a slight female predominance, and the average age was 45.6 years (01months-95years).

37% of patients consulted emergency departments, 43% hospital departments, 7% of patients referred from the private sector for urgent consultation, and 7% of staff consulted for urgent dermatological conditions.

The reasons for consultation were: infectious pathologies in 47% (Erysipelas in the lead), inflammatory pathologies in 24%, toxidermia in 7%, autoimmune bullous dermatosis in 4%, tumor pathologies in 3%, and others in 15% of cases. fig1

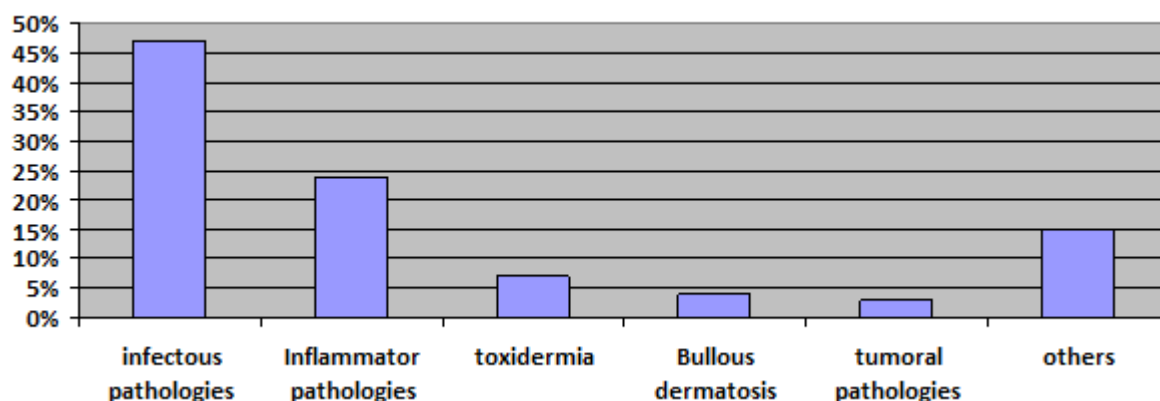


Figure 1 : distribution of the mean reason for emergency dermatological consultation

Infectious pathology was dominated by bacterial infections (22%): (erysipelas in the lead 12,6%, folliculitis 1,8%, cellulitis 1,4%, impetigo 1,2%), followed by viral infections 10% (varicella zoster 5,3% , herpes zoster 2,3% ), then fungal infections 9% (dermatophytes 5,5%) and the parasitic infections 6% (gale 5,7%) fig2

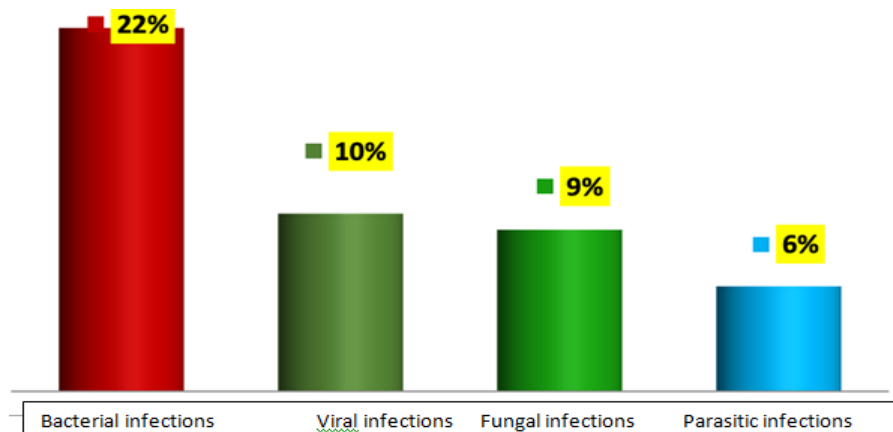


Figure 2 : distribution of infectious diseases

Inflammatory pathologies is the second diagnosis (24%) (psoriasis (3,9%) , eczema(3,1%) and urticaria (2,4%)

the third reason for consultation was toxidermia (7%) (simple maculopapular exanthema in the lead ) followed by autoimmune bullous dermatoses (4%) (pemphigus (2%) in the lead)

79 cases (5,9%) were hospitalized as emergencies and while the others (94,1%) only needed an ambulatory care.

## Discussion

"Dermatological emergency" is defined as any acute dermatological disorder that develops and worsens in less than 5 days. True dermatological emergencies" are: Infectious dermatosis, inflammatory dermatosis Toxidermia and Autoimmune bullous dermatosis. (3,4)

Fewer than 20 studies have been published in the literature concerning urgent dermatological consultations. Our results concur with those of the literature concerning the average age of patients and the main reasons for consultations, with erysipelas in the lead. (5,6)

1321 consultations were reported in our study over a period of one year (3.7consultations/day), which is in line with the Y.ELArabi-Morocco study (3.8/d) (7), and it greatly exceeds the prevalence

seen in the series of N.Ogut et Al (1.1/j) (8), but remains lower compared with a Spanish study by D.Bancalari et Al (10/j)(9), and a Portugal study by M.Alpalhao (23,6/j) (10). This finding can be explained by the health system organization of each country

The mean age of the patients was 45,6 years which is in line with other studies ranging from 44-47 years

Regarding, the most common reasons of consultation, The results of our study are in line with those of other studies, with infectious pathologies in first place, followed by inflammatory pathologies, toxidermia and finally autoimmune bullous dermatoses.

The hospitalization rate in our series is 5,9% , which higher than In the other series (1,9-3,1%) but much lower than Turkish series (11,5%) (8) and Moroccan Series (7,8%) (7)

### **Conclusion:**

The pathologies encountered in dermatological emergencies are very diverse. However, the majority of patients do not require an emergency consultation.

This research project is an educational guide to the main dermatological emergencies in Morocco, aimed at residents and other healthcare professionals.

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