

# Spectrum of skin neglected tropical diseases in the Department of Dermatology at the Ibn Sina University Hospital of Rabat (Morocco)

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## INTRODUCTION

Neglected tropical diseases (NTDs) are defined by the WHO as a diverse group of acute and chronic conditions that include several parasitic, viral, and bacterial diseases that cause substantial illness and death for approximately 350 000–500 000 persons around the globe [1].

## MATERIALS & METHODS

We performed a retrospective and a descriptive study covering a period from January 2017 to January 2021, we included patients with severe, multifocal forms of NTDs that required systemic treatments, patient's files were retrospectively analyzed, the epidemiological and clinical data were retrieved from the medical records. The aim of our study was to evaluate the significant impact of NTDs, the number and features of patients diagnosed with NTDs in our center. The diagnosis was made clinically, histologically and required bacterial, parasitic and/or fungal samples for microscopic species confirmation

## RESULTS

41 cases of NTD were diagnosed of all hospitalized patients, the distribution of NTDs was as follow: 15 cases of leishmaniasis (2 leishmaniasis in HIV patient, 2 sporotrichoid leishmaniasis, 3 verrucous subtype, 4 ulcerated 2 erysipeloide like and 2 forms of multiple disseminated leishmaniasis), 11 mycetoma (4 actinomycetoma, 7 eumycetoma), 10 cutaneous tuberculosis (including 2 bone and 2 lymph nodes involvement), 4 cases of leprosy (2 tuberculoid leprosy, 1 lepromatous leprosy, 1 borderline leprosy) and one fatal case of a disseminated strongyloidiasis in a pemphigus patient. The duration of disease before diagnostic was variable (3 months to 12 years).

The mean age of our patients was 47.7 years old. All of our cases were autochthonous infections expect for 2 patients (1 leprosy and 1 mycetoma both from Mali). All of our patients had a low socio-economic background with no social security. 5 patients died due a severe disseminated disease (2 cases of leprosy, 1 leishmaniasis, 1 tuberculosis, 1 actinomycetoma).

## DISCUSSION

The term 'neglected tropical diseases' was first introduced by the author Peter Hotez in his book "Forgotten People, Forgotten Diseases", where he describes the common characteristics and social impact of the NTD on patients around the world [2]. Indeed, NTDs are largely present in rural and poor urban settings with lower socioeconomic status especially in low middle income tropical and subtropical countries but also in some population of Southern Europe, due to high immigration rate and climate change. A list of 17 NTDs has been established by the WHO and include: Buruli ulcer, human African trypanosomiasis, cysticercosis, rabies, dengue, Chagas disease, echinococcosis, endemic treponematoses, leprosy, dracunculiasis, foodborne trematode infections, onchocerciasis, leishmaniasis, filariasis, schistosomiasis, helminthiasis and trachoma. All these diseases share the same clinical features:

Cutaneous manifestations with variable degree of pain and itching, anemia, acute or chronic pain, diarrhea, visceral involvement, psychiatric and neurological condition (depression, low self-esteem, seizure), malnutrition, cognitive impairment leading to compromised education and loss of productivity in adults, stigma and discrimination due to disability and disfigurement [3].

Due to its geographic location at the north-west corner of Africa and its typical Mediterranean subtropical climate, Morocco is a bridge between the European and the African continent and a great melting pot country with mixed skin phototypes and various infectious diseases.

These NTDs continue to cause a massive burden of morbidity and mortality in our country. Raising awareness among health care professionals and education of the patients and their family are a cornerstone for a quick and effective treatments to avoid any social stigmatization.



(a) Yellow crusty plaque Leishmaniasis of the forearm in a 16-years-old male patient

(b) Multi-fistulized pseudotumor of the foot revealing an eumycetoma (Maduralla mycetomatis) in a 53 female patient.



(c) scrofuloderma (cutaneous tuberculosis) of the inguinal fold and the popliteal fossa in a 60-years-old female Moroccan patient.

## REFERENCES

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