COMPELLING COMMENTS

Passion to Heal – Dermatology Volunteering in the Maasai Mara, Kenya

Maulik M Dhandha, MD[1]

[1]MDFMR Dermatology, Augusta, ME

Access to dermatology is still limited in several parts of the world. In August 2018, I was part of a volunteer team of dermatologists, physician assistants and medical assistants in the Maasai Mara region of Kenya. We worked along with the local staff at Baraka Hospital. Our goal was to help evaluate, and triage patients with skin conditions over the period of one week and in the process help educate the local team to continue follow up of those patients. The key highlights of the trip were its well organized nature from ticketing to lodging to itinerary, the supportive local staff, and how grateful patients were with evaluation of their conditions. The key challenges to our work there were limited resources and time available, socio-economic difficulties of the local population, lack of an established dermato-pathology center, etc.

Management of dermatology patients involved making clinical diagnoses without histopathology and empiric treatment from an available medication formulary. Dermatology is a visual field, and it was one of the opportunities to implement our observational skills. The spectrum of medical illnesses was completely different from those seen in the United States. We had to switch from cutaneous oncology to inflammatory skin disorders and infectious disease. Herein I describe three interesting cases seen by the group.

A middle-aged African male presented with 5-year history of unilateral lower extremity swelling. Patient reported no prior trauma or injury to the extremity. On examination, he had significant left lower extremity swelling, overlying hypertrophic/verrucous stasis changes and classic “hanging groin”. Prior treatments included leg elevation exercises and various “dressings” with no improvement. Given the presentation of unilateral lower extremity swelling and hanging groin, a clinical diagnosis of Wuchererria Bancroffti induced elephantiasis was made.[1,2] Treatment with Ivermectin alone only kills microfilariae, but not the adult worm.[3] Use of Albendazole in combination can aid in treating the adult worm. [3] Patient was thus treated with combination of both with instructions to follow up at least yearly for additional treatment as often times adult worm survives the treatment and new microfilariae can occur.[3,4] Repeat treatment yearly allows killing newer microfilariae until the adult worm dies of senescence.[1,2]

A second interesting case was of Onchocerciasis. A middle-aged African female presented with depigmented plaques on the extremities, and itchy nodules and plaques on the thighs (Figure 1). On further examination, patient also reported blindness in one eye. Clinical diagnosis was consistent with Onchocerciasis. The patient was treated

Copyright 2018 The National Society for Cutaneous Medicine

Figure 1: An African female with depigmented plaques and itchy nodules on the lower extremities.

with Ivermectin.[4] Since it only helps treating the microfilariae, she was asked to follow up in 3 months for repeat treatment. An additional treatment option that is now available, although not the standard of care or goal of local public health programs is treatment with Doxycycline 100 mg daily for 6 weeks. It allows killing the adult parasite by depleting its essential endosymbiont (Wolbachia) bacterium.[5]

Another interesting case seen by our team was Discoid Lupus with possible features of Systemic Lupus. Patient presented to the clinic with history of “lighter skin spots” for several years. He reported “sun sensitivity” and frequent headaches. He had a remote history of oral ulcers. He never had prior biopsy or work up. Ideally, ANA along with autoimmune work up as well as skin biopsies would help confirm the diagnosis, but could not be done as patient deferred due to socio-economic reasons. He was started on Plaquenil after getting blood counts and hepatic panel.

In addition, other teams also saw cases like Chromoblastomycosis (based on prior histology from tertiary care center in Kenya), possible Pityriasis Rotunda, and an undiagnosed Epidermolysis Bullosa. The latter two could not be confirmed due to unavailability of histopathology services and/or genetic testing. The Pityriasis Rotunda patient was treated with topical corticosteroids with instructions to monitor for any weight loss for potential malignancy.

As medical professionals in United States, we often struggle to find optimal plans between ideal treatment and actual available treatment due to insurance and other socio-economic issues. This “gap” of ideal versus available treatment was even more pronounced in Kenya. It was important to recognize the need in the community, limited available resources, and choose the appropriate treatment for patients that was both helpful as well as sustainable in cases of chronic diseases.

The practice style was also very different. There were no scheduled appointments. The hospital ran on a different model of walk-in outpatient/acute care clinics. Every weekday morning, patients would start lining up outside the triage room and wait in the hospital courtyard. We saw patients with mainly skin conditions, but also occasionally saw patients with other concerns. On average we saw 80-100 patients divided amongst 5-6 teams. (Figure 2) The majority of the patients did not speak English and so every team had a translator which happened to be local care provider. This was really helpful in quickly adapting to the available resources in the clinic. In addition, we went to

Copyright 2018 The National Society for Cutaneous Medicine

Figure 2: The author's medical team.

local schools for deworming treatment of students and for screening them for skin infections. We screened over 500 pediatric patients during these school trips. On the last day at the hospital, they provided us educational time where we were able to discuss interesting cases seen over the week and educate the local providers about common skin conditions.

Our trip was completely organized by ME to WE. This allowed physicians, nurse practitioners and medical assistants to focus on medical work alone. The organization's amazing efforts made sure that the trip was well planned from start to finish - including booking of tickets, local transportation in Kenya, boarding and lodging, volunteering hours and facility, translators for the clinic, and the beautiful cultural experience around it. The cultural experience allowed us to better understand the local dynamics including patient expectations, resources and strengths of the local staff. Although a short trip, it was an opportunity that allowed all of us to not only help patients with skin conditions but also to learn more about the local culture, socio-economic structure and medical practice in Maasai Mara, Kenya.

Conflict of Interest Disclosures: None.

Funding: None.

Corresponding Author:
Maulik M Dhandha, MD
MDFMR Dermatology
Augusta, ME
maulikdhandha@gmail.com

References:

1. Alto W, Parasitic diseases, in Little Black Book of International Medicine. 2008: Burlington, MA
2. va Hees C, Naafs B, Common skin diseases in Africa. An illustrated guide. 2001: Jan Sterken of Studio Oss
3. Gyapong JO, Kumaraswami V, Biswas G, and Ottesen EA, Treatment strategies underpinning the global programme to eliminate lymphatic filariasis. Expert Opin Pharmacother 2005; 6: 179-200
4. Ottesen E. Filariasis, in Infectious diseases, Jonathan C, Steven O, Powderly W. 3rd edition. 2010: Mosby
5. Hoerauf A, New strategies to combat filariasis. Expert Rev Anti Infect Ther 2006; 4: 211-222

Copyright 2018 The National Society for Cutaneous Medicine