



SKIN HEALTH MATTERS

MILLIONS OF PEOPLE AROUND THE GLOBE SUFFER FROM SKIN DISEASES. LEARN HOW ONE SPOT ON THE SKIN COULD BE A SIGN OF A LIFE THREATENING DISEASE.

Like many physicians practicing in the United States, I was under the impression that diseases such as Kaposi's sarcoma (an HIV related cancer that appears first on the skin) were becoming a thing of the past. Yet, Kaposi's sarcoma is the most common HIV-associated malignancy in sub-Saharan Africa.

One Patient's Story: East Africa

My patient can't breathe. From across the busy, open ward you can see the plaques of Kaposi's sarcoma riddling her skin. The impressive swelling that comes along with the skin lesions has enlarged her legs to the size of small tree trunks.

When she dies six hours later, we can be pretty sure that it is her Kaposi's sarcoma which has spread to her lungs, along with her underlying HIV, that killed her. Her family tells us that she has had dark spots on her skin and swelling in her legs for over a year before she presented to the hospital. Like many of our patients in East Africa, she sought help from a traditional healer for many months before eventually turning to the biomedical health system, only hours before her death.*



Dr. Freeman training a healthcare worker in Kenya to perform a skin biopsy to diagnose Kaposi's sarcoma.

Lack of Access – Lack of Training

My patient's story may have had turned out differently if she had known to seek care earlier or if local health care workers were able to diagnosis the spots on her skin promptly as Kaposi's sarcoma. In most cases, Kaposi's sarcoma can be diagnosed through a skin biopsy, in the same way that we diagnose skin cancer here in the United States. Earlier diagnosis can lead to earlier treatment, and ultimately improved survival.

Some of the issues we face in resource-poor settings include:

- Limited training of healthcare workers
- Lack of diagnostic tools and equipment
- Poor patient access and transportation to sites providing quality care

One of the most critical factors in patient outcomes is the challenge of rapid and accurate diagnosis in an environment with little technology, wrenching poverty and harsh travel conditions. Fortunately, by sharing our knowledge we can help advance early diagnosis and treatment for diseases such as Kaposi's sarcoma.

Lives Can Be Saved by Early Diagnosis

We have developed our version of a Kaposi's sarcoma "SWAT" team: by training healthcare workers in rural areas of Kenya and Uganda to do skin exams and skin biopsies on patients far from larger hospitals, we are diagnosing patients earlier in their disease, leading to earlier treatment and lives saved. In addition, we are currently researching novel rapid, point-of care diagnostic strategies. We are evaluating if existing technologies and concepts can be adapted from other areas of medicine, to make diagnosis for patients in some of the poorest areas of the world even faster.

Dr. Freeman says, "I realize the pace will be slow, but the result will be that no patient anywhere in the world will slowly suffocate from Kaposi's sarcoma because the care needed simply wasn't part of the community's training."

To learn more about our mission, visit www.massgeneral.org/dermatology/globalhealth

Footnote: Dr. Freeman does not currently work in Ebola-affected areas. For MGH information visit <http://mghcgh.org/>

*Story adapted from Dr. Freeman's editorial in the *Journal of Investigative Dermatology*, 2014, Volume 134.