

The Status of Practice of Breast Pathology Across the Globe: A Critical Need for Improvement

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Breast Cancer

The Plan

- **To outline the challenges associated with breast cancer/breast pathology in resource limited countries**
- **To call for strategies to improve the access to optimal breast pathology across the globe**

Breast Cancer

The Facts

- **The most common cancer among women across the globe accounting for 22% of 4.7 million new cancer cases per year**
- **The second leading cause of cancer death among women**
- **Women who die from breast cancer lose an average of 20 years of life**
- **Most breast cancer deaths occur in countries of limited resources**

Breast Cancer

The Facts

- A major public health problem across the globe
- A physical and psychosocial threat to women's lives



Breast Cancer

The Advances

- **Enhanced public awareness and screening**
- **Improvement in breast imaging**
- **Introduction of minimally invasive diagnostic and therapeutic procedures**
- **Interest in breast cancer risk reduction and prevention**
- **Discovery of breast cancer genes and new molecular pathways**
- **Introduction of molecular targeted therapy**

Breast Cancer

The Progress

- Mortality from breast cancer has decreased 1-2% per year since the 1990's in resource-rich countries
- Mortality from breast cancer continues to increase in countries of limited resources and among medically underserved populations

Breast Cancer

Examples of neglected breast cancer cases



Breast Cancer

The Message

- **Improvement in breast cancer survival is achievable when appropriate resources are available**
- **It is possible to favorably impact the breast cancer mortality rate by applying incremental changes in cancer care within a population**

Breast Cancer

The Barriers

- Diversity in patient population with different genetic background, social values, religious beliefs, lifestyles and culture
- Differences in economic status and health care priorities

Breast Cancer

The Link

- **There is a significant relation between the status of breast cancer/breast pathology and global health disparities**

Global Health

Social and Economic Determinants of Health Disparities

- Income
- Gender
- Social status, power, prestige
- Culture, traditions, family and community beliefs
- Social support networks
- Education, knowledge
- Access to and use of health services

Global Health

What is the scope of the challenge?

- Infectious diseases**
- Chronic diseases**
- Cancer**
- Maternal and child health**
- Environmental threats**
- Health systems shortcomings**
- Determinants of poor health**

Global Health

Communicable Disease/Infectious Disease

- **HIV/AIDS**

- **A major epidemic**

- **Tuberculosis**

- **In 2011 there were around 1.4 million TB related deaths worldwide**

- **Malaria**

- **In 2010, an estimated 219 million cases occurred globally, while the disease killed about 660 000 people, mostly children under five years of age.**

Global Health

Non-communicable Diseases/Chronic Illnesses

- Cardiovascular conditions**
 - Heart disease**
 - Stroke**
- Chronic respiratory conditions**
- Diabetes**

These conditions cause the greatest global share of death and disability, accounting for around 60% of all death worldwide

Global Health

Cancer Burden

- In 2008, 56% of new cancers were in developing countries, by 2030 this proportion will increase by 70%
- Most common cancers worldwide are lung, breast, colon, stomach, and prostate
- Growing recognition that global cancer must be a top priority in global health
- ~ 5% of global resources for cancer are spent in low middle income countries



Global Health

Challenges of Diagnosis and Tissue Sampling in Low Resource Countries

- Limited financial resources**
- Inadequate number of appropriately trained pathologists and technologists**
- Inadequate ancillary diagnostic tools**
- Inadequate access to focused education**

Global Health

Challenges of Diagnosis and Tissue Sampling in Low Resource Countries

- Under recognition of the value of pathology diagnosis**
- Lack of sufficient infrastructure for optimal practice of breast pathology**
- Late stage disease presentation**

Late Disease Presentation



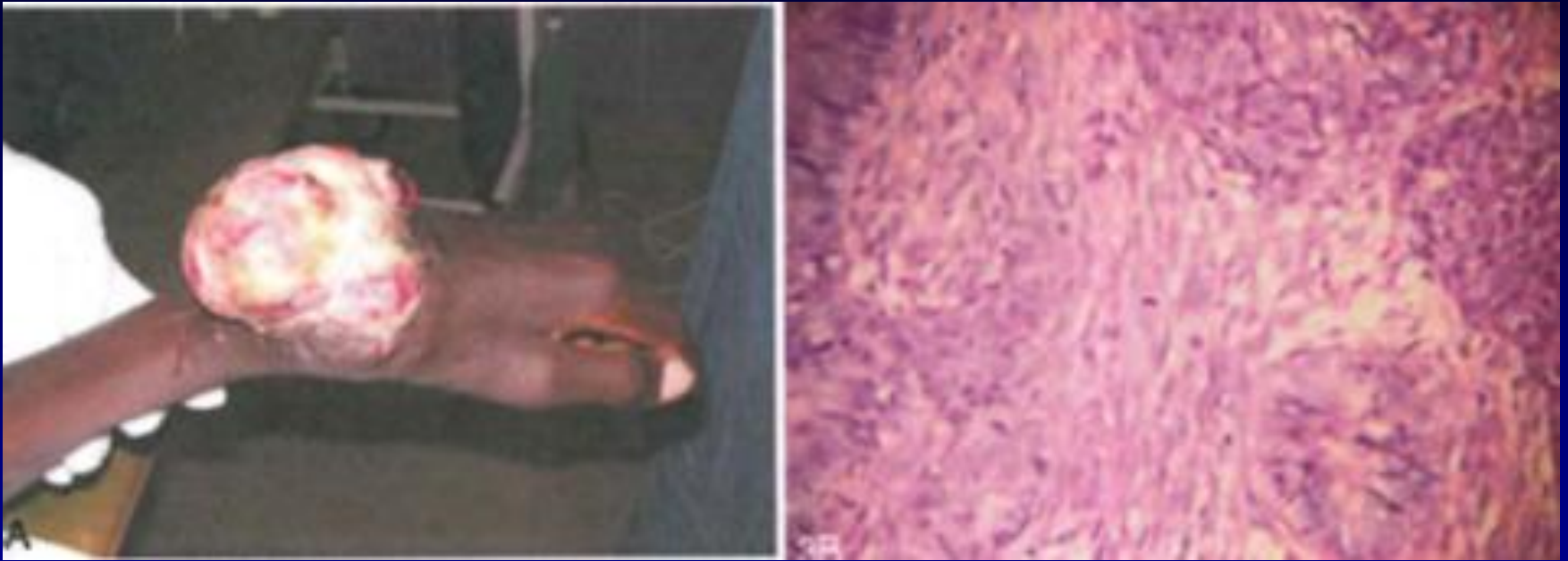
Advanced Actinomycosis of Inner Thigh

Late Disease Presentation



Neglected Leg Abscess

Late Disease Presentation



Neglected Synovial Sarcoma

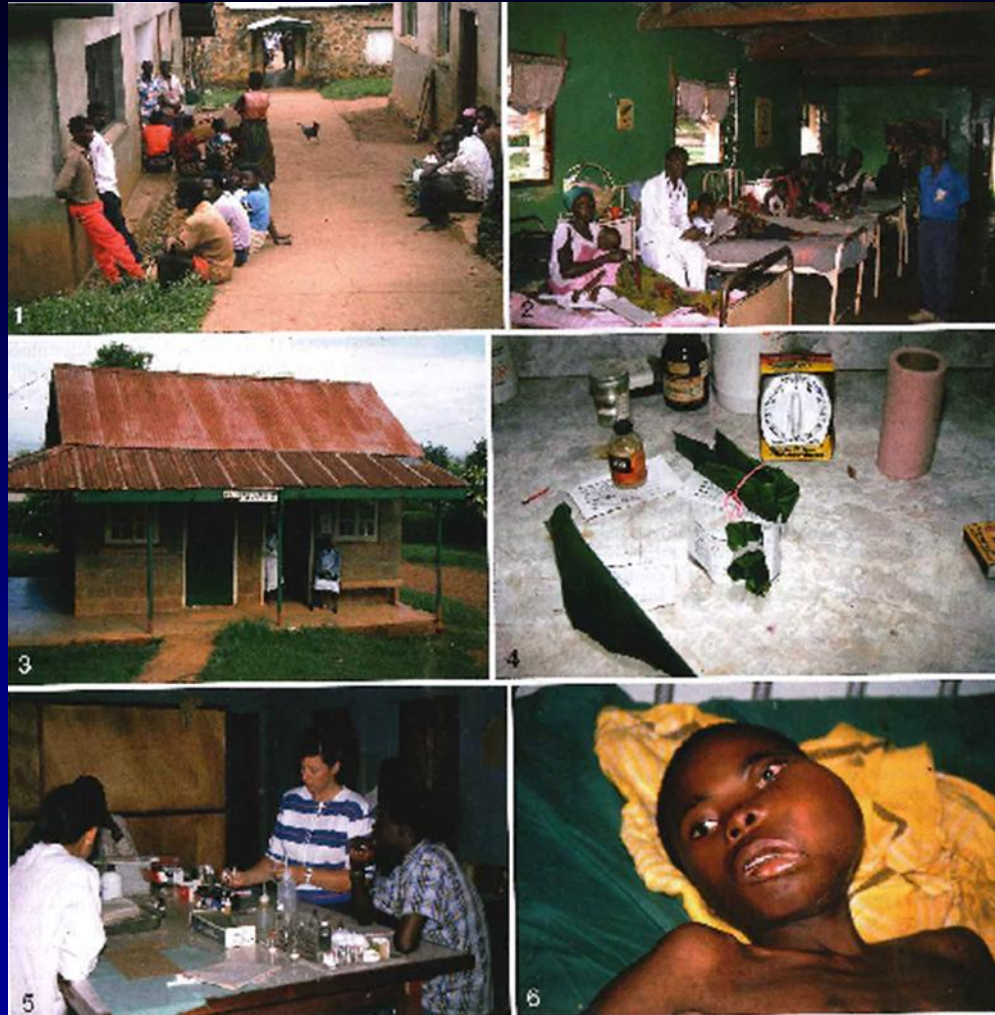
Suggestions

- **Acknowledgment of the necessity of establishment/improvement of pathology practices across the world**
- **Realization of the value of integration of breast pathology into clinical practice**

Suggestions

- **Exploring funding opportunities for building the essential infrastructure for offering on site optimal pathology diagnosis**
 - **Resource allocation**
 - **Philanthropy and partnership with local/international community**

International Collaboration in Zaire, Africa

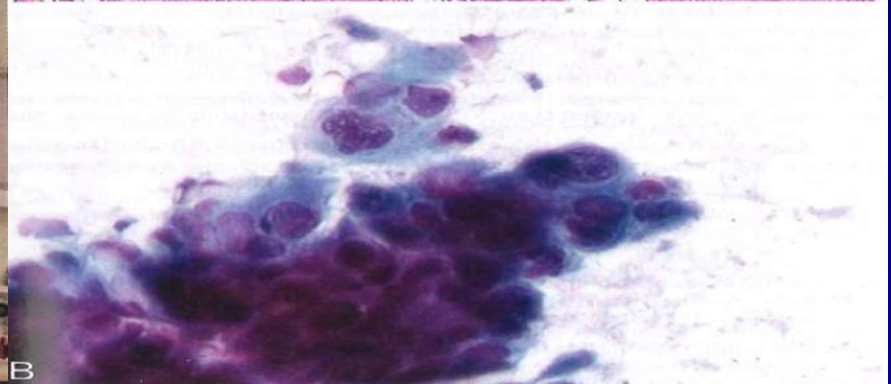
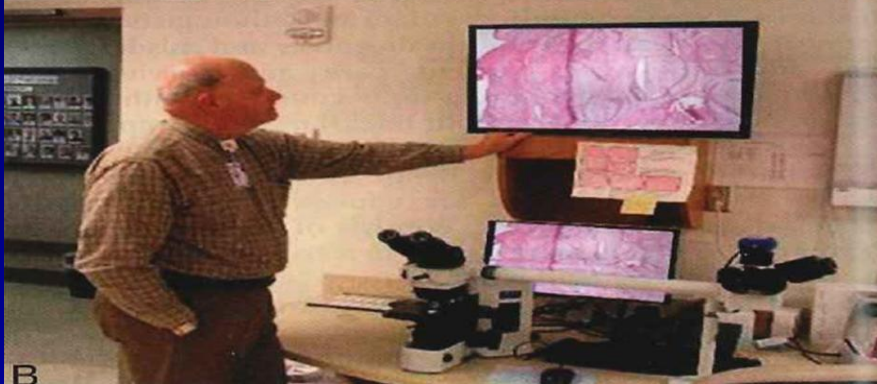
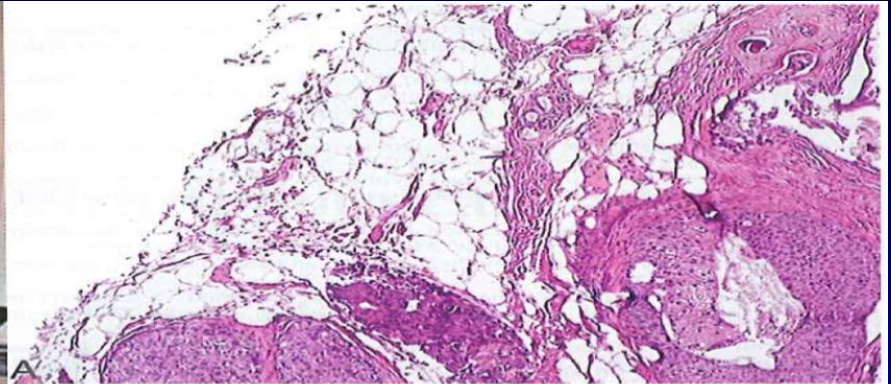
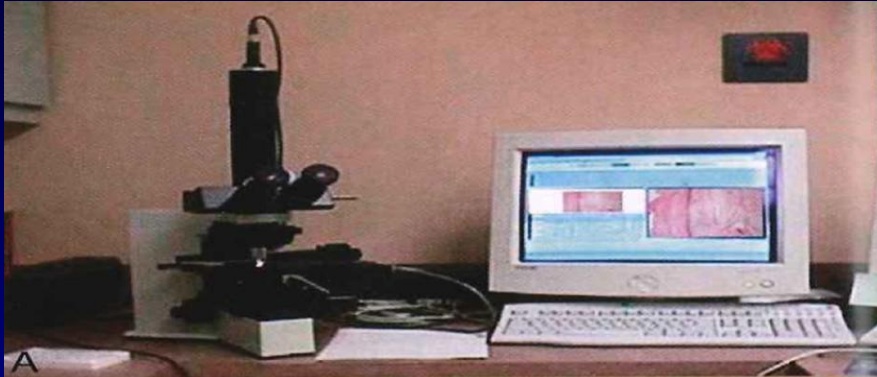


Pathologists Oversee Foundation

Suggestions

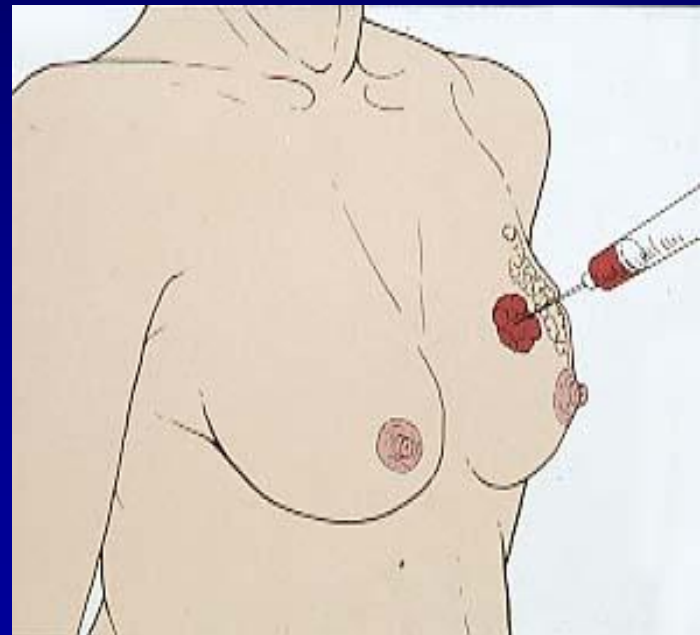
- **Encouraging intentional collaboration and networking in:**
 - Assistance in training
 - Offering access to pathology services
 - Telepathology

Telepathology

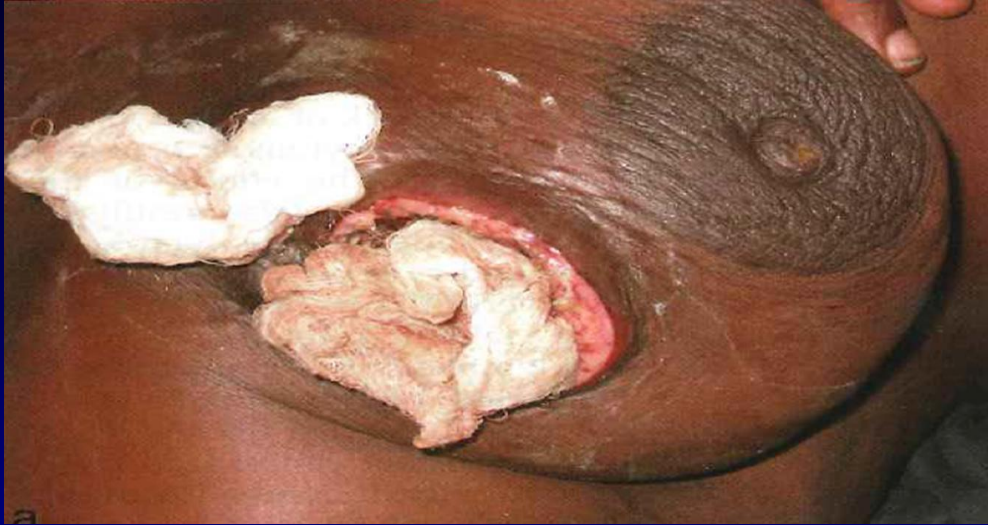


Suggestions

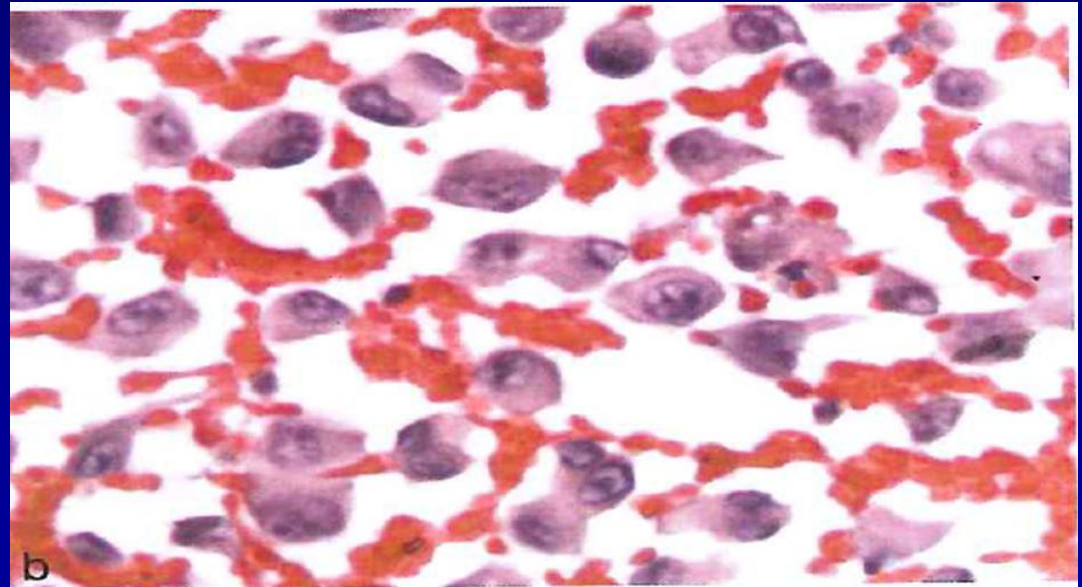
- Promoting the value of fine needle aspiration biopsy and cytology as the most cost effective sampling procedure



Cytology as a Diagnostic Procedure



**Breast Cancer
Diagnosed by
Imprint
Cytology**



Suggestions

Establishment of the “International Institute of Breast Pathology” to serve as a bridge to connect a diverse group of pathologists with similar vision of providing a better quality of breast pathology to women of the world

