ACLES 2017

Interesting Podiatric Cases from the Podiatry Service of the Icahn School of Medicine at Mount Sinai

Bryan C. Markinson, DPM

The Leni and Peter W. May Dept. of Orthopedics
Department of Dermatologic Surgery
Melanoma and Skin Cancer Program
Tisch Cancer Institute

Consultant – Bako Integrative Podiatric Solutions

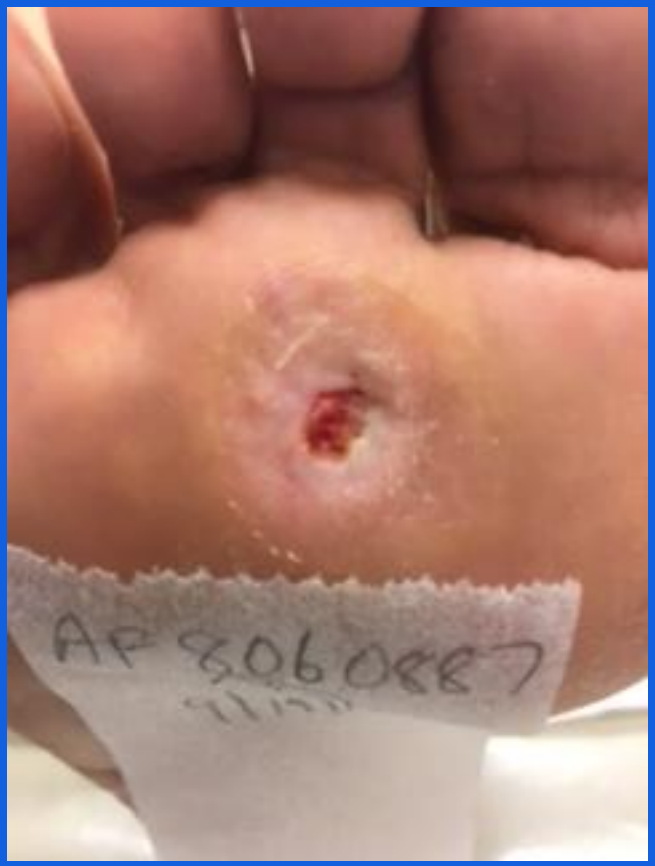
Presenter Disclosures

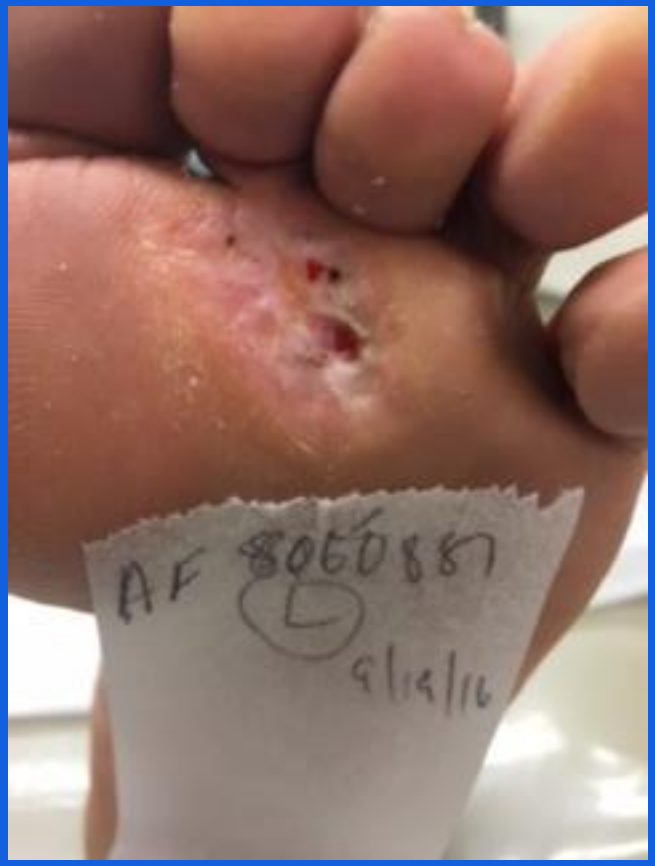
Bryan C. Markinson, DPM

The following relationships with commercial interests related to this presentation existed during the past 12 months:

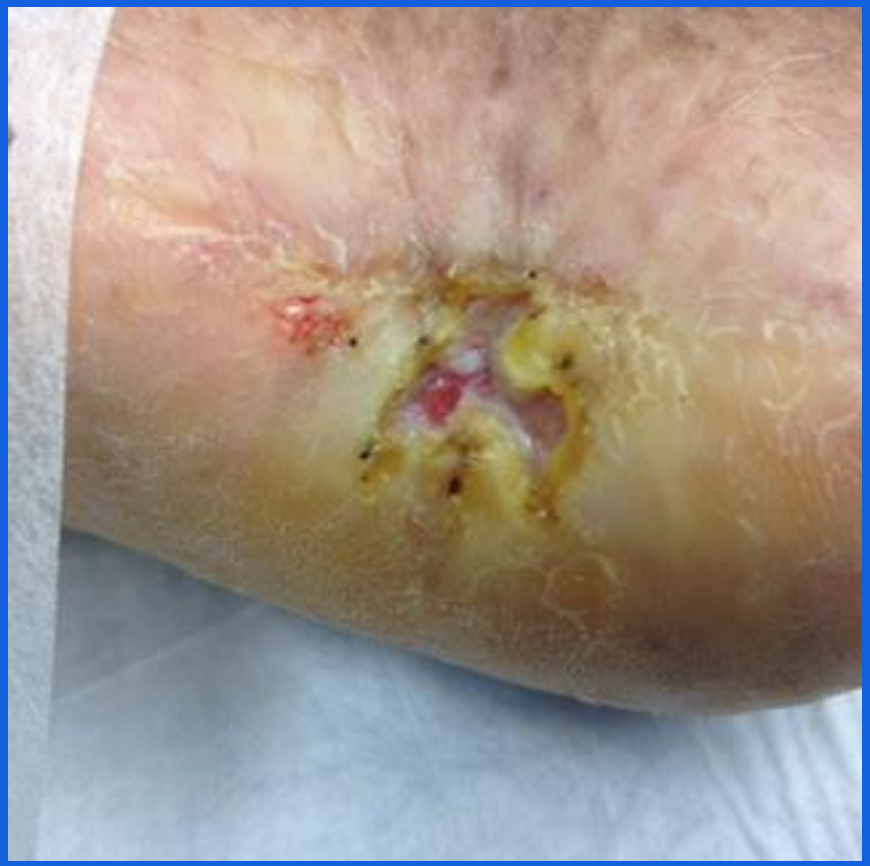
No relationships to disclose

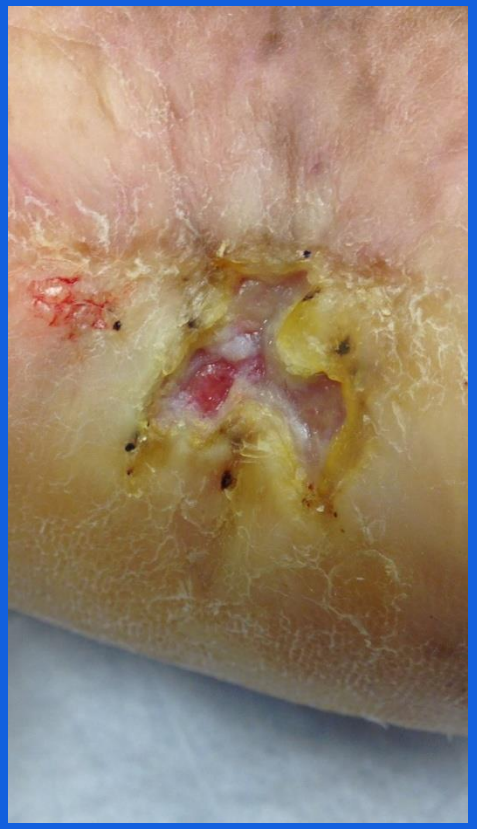
Bilateral warts treated with radiation 40 years ago – 66 year old female



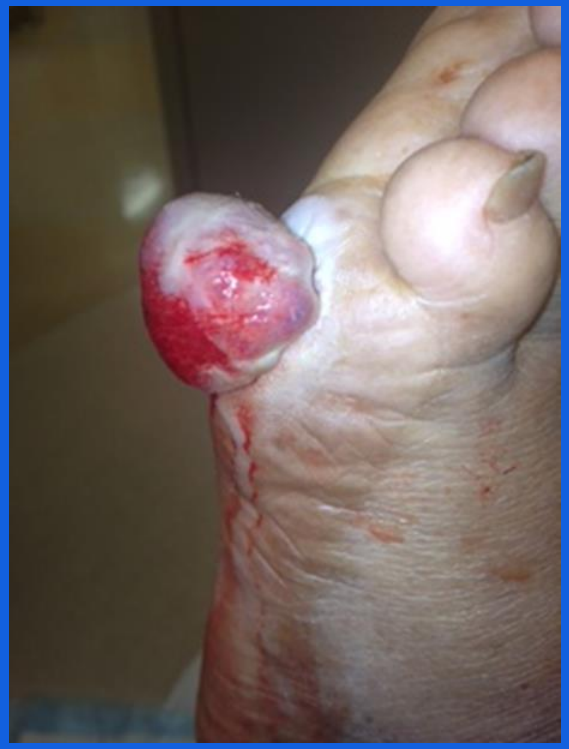


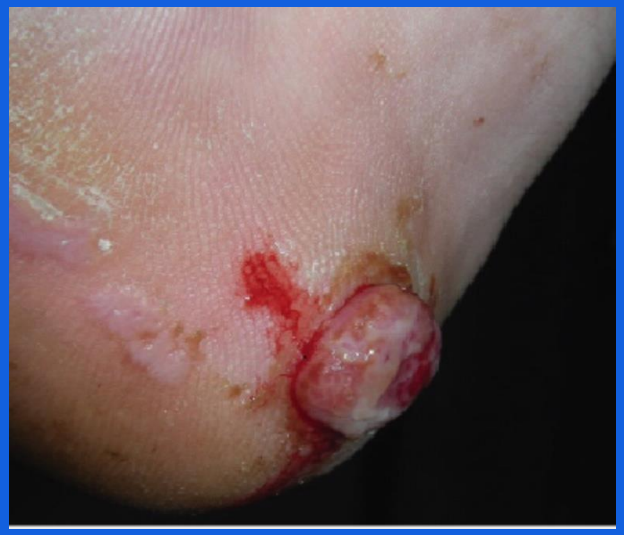
26 year old female who had radiation for SCC

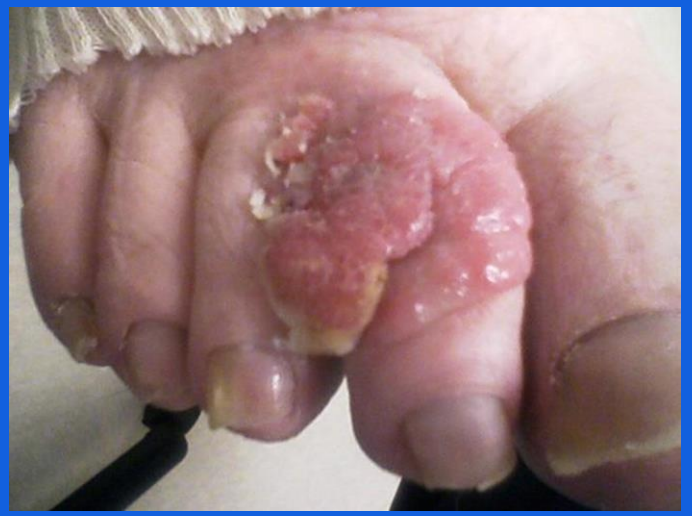




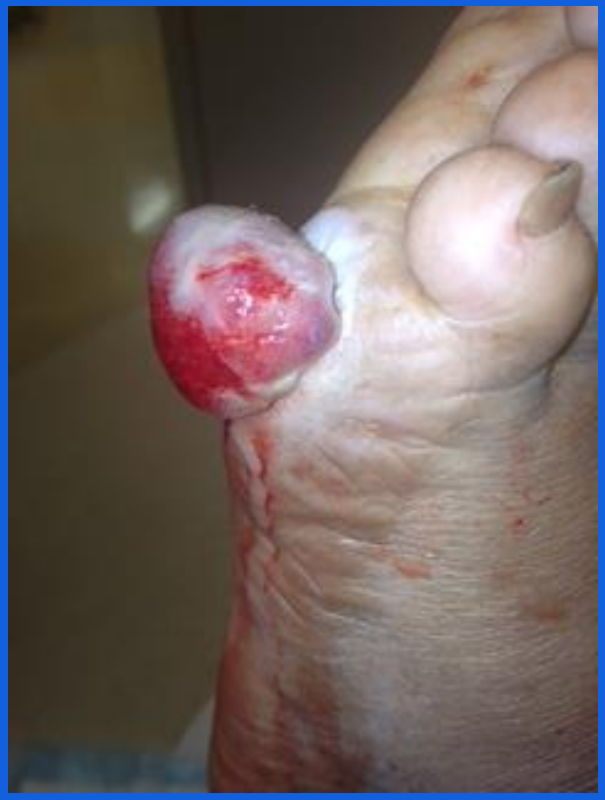
Which is most concerning?

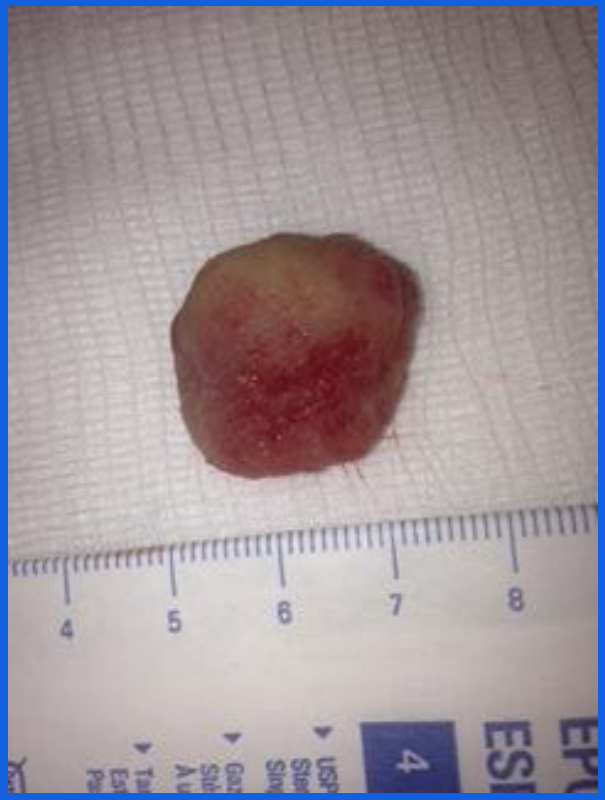


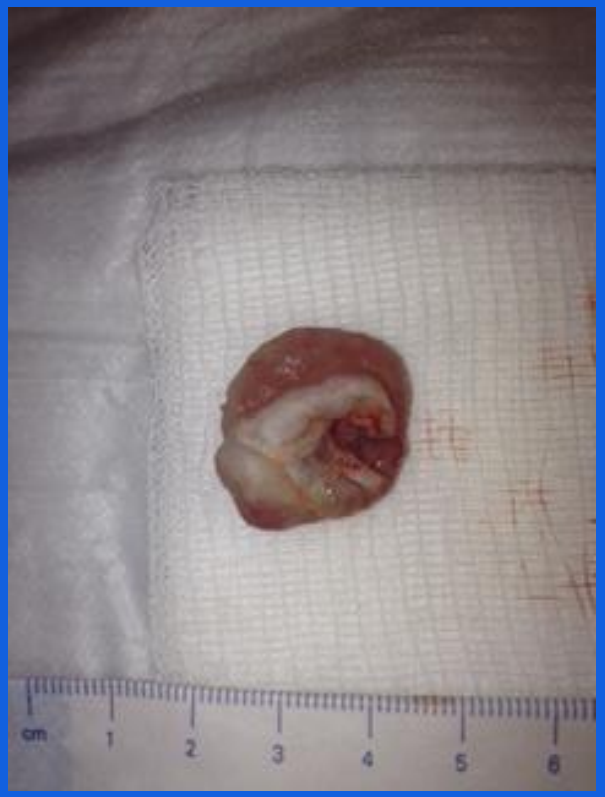




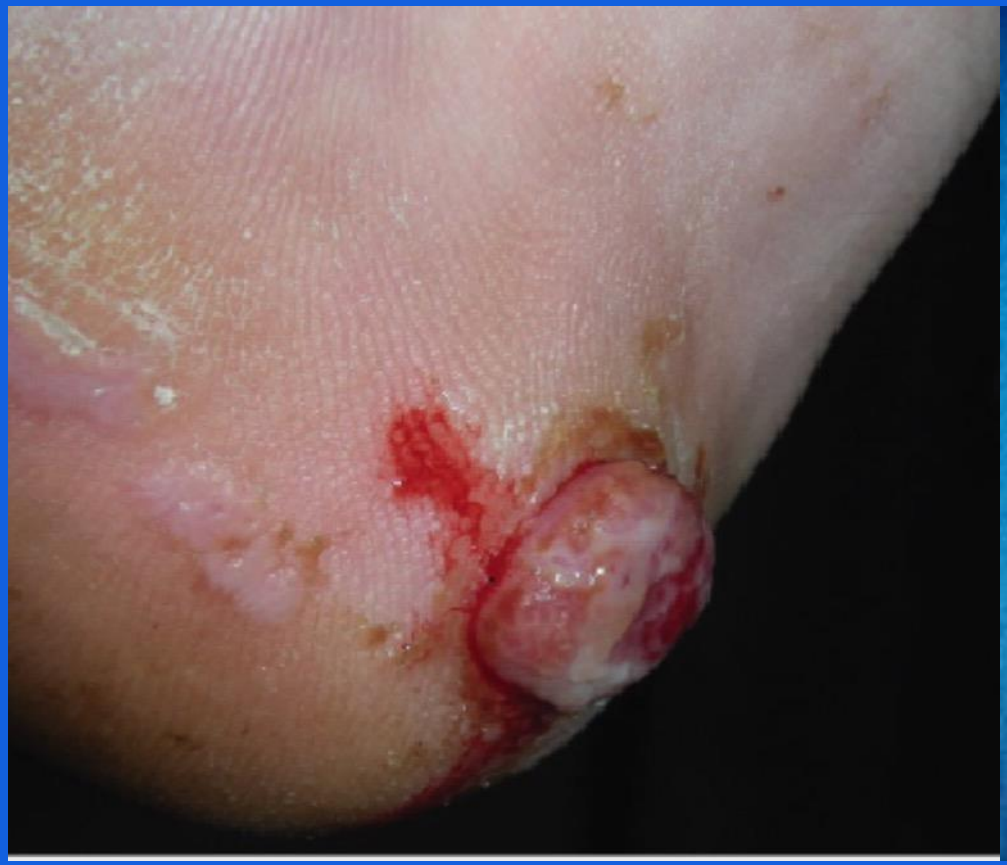
Pyogenic granuloma – Delay?

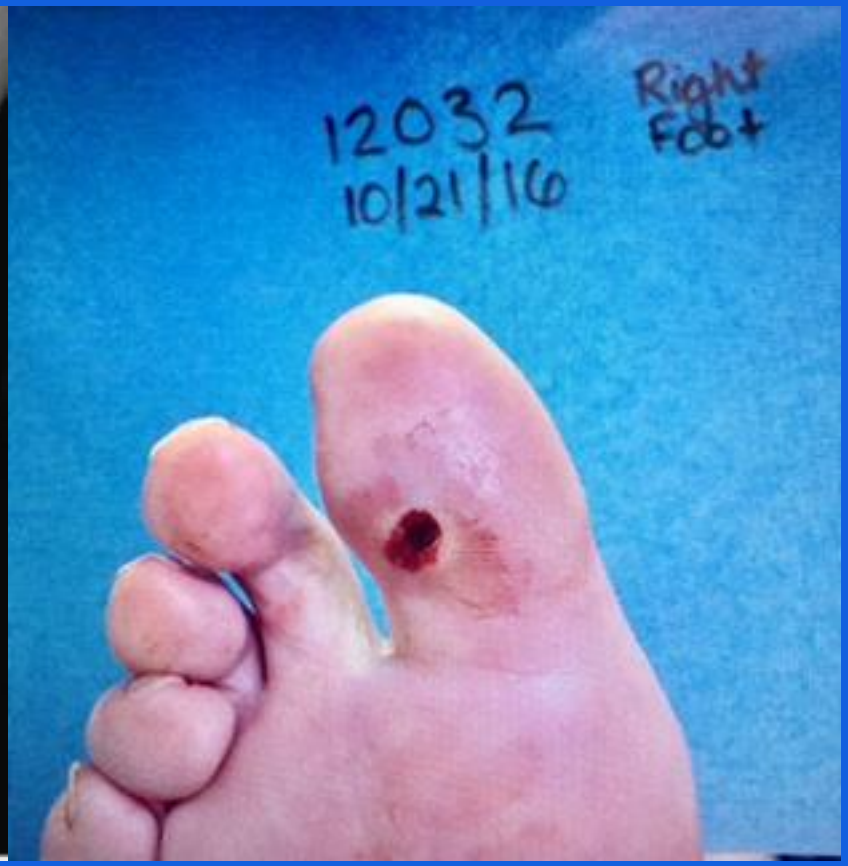






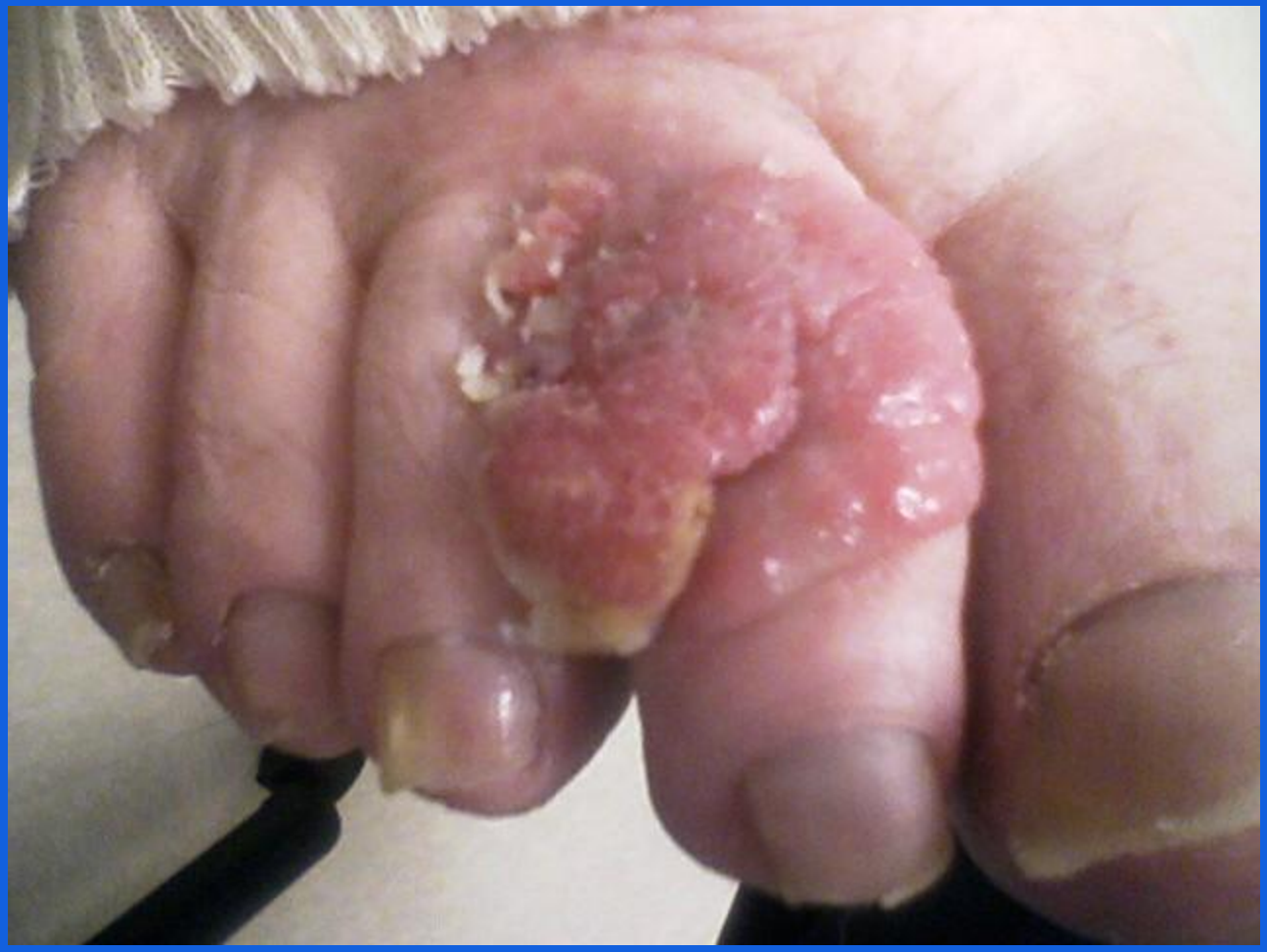
Pyogenic granuloma – Delay?



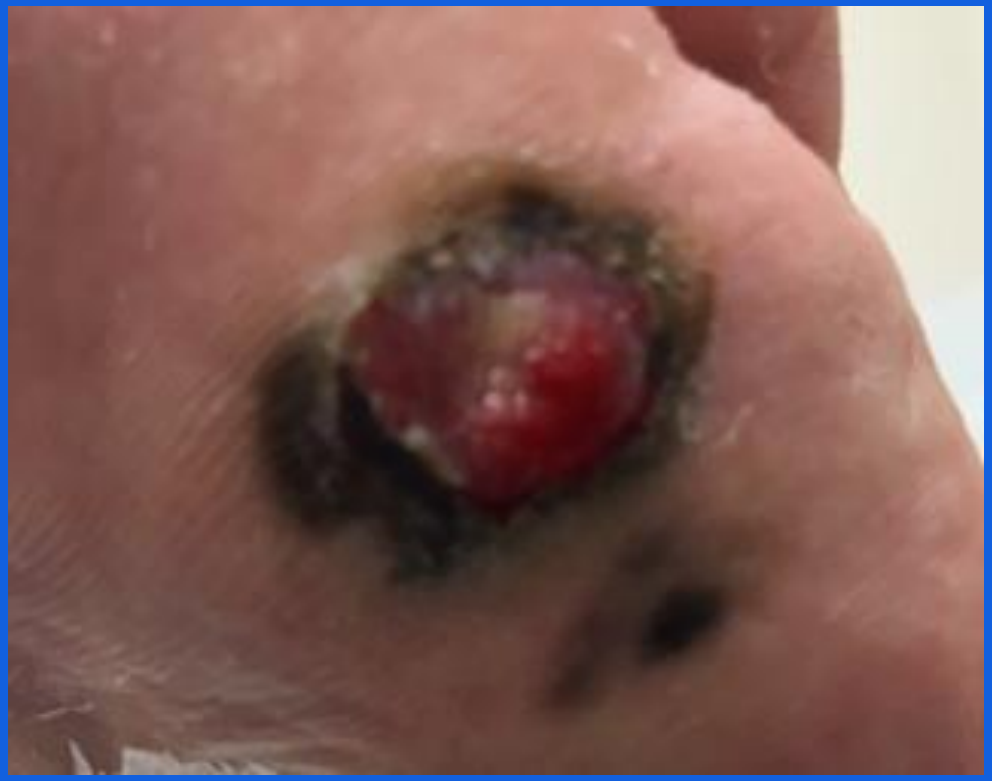


Courtesy Kelly Powers, DPM

Pyogenic granuloma – Delay?
Disseminated melanoma



ALM self treated as a callous - Delay



It was a hematoma with good granulation tissue

A colleague said it was a ”bad ulcer”

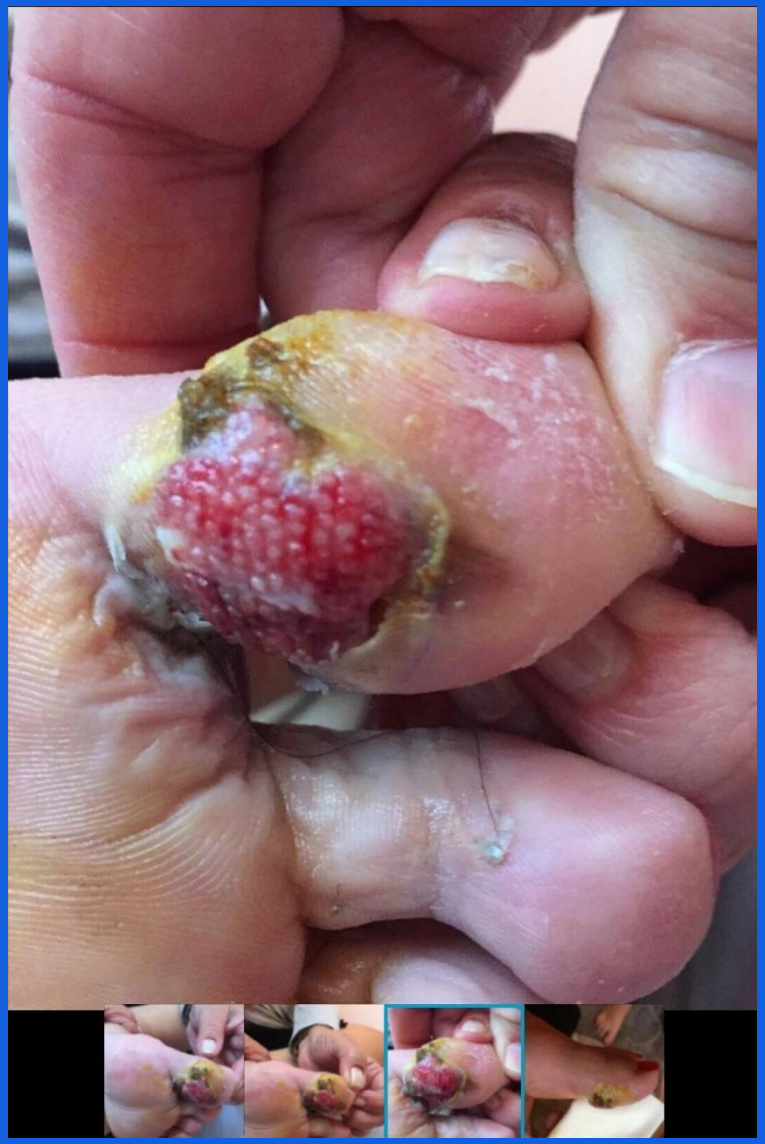
I drained a hematoma

I used antibiotics

I ordered an MRI when it didn’t get better

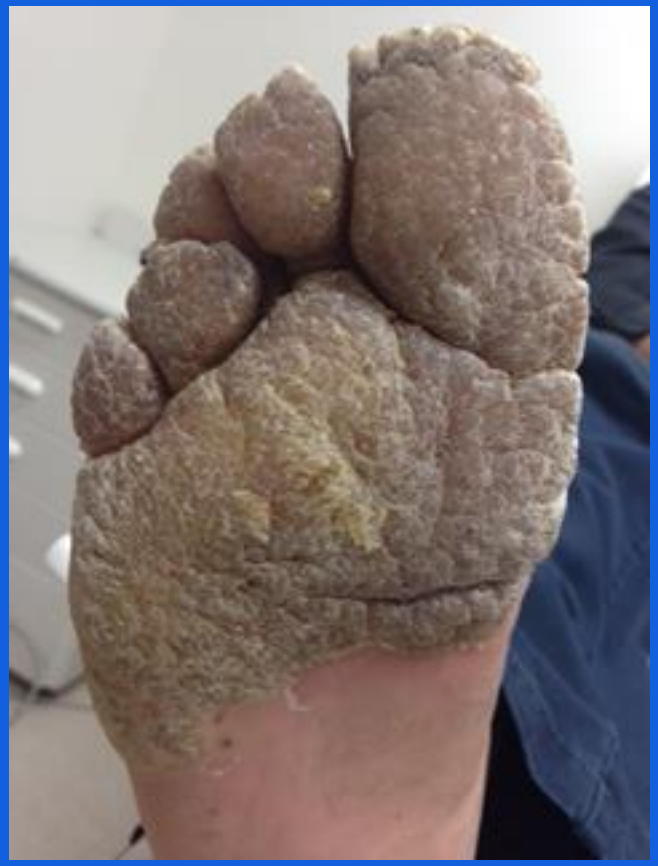
While waiting for MRI authorization, patient saw another DPM who biopsied it on the spot

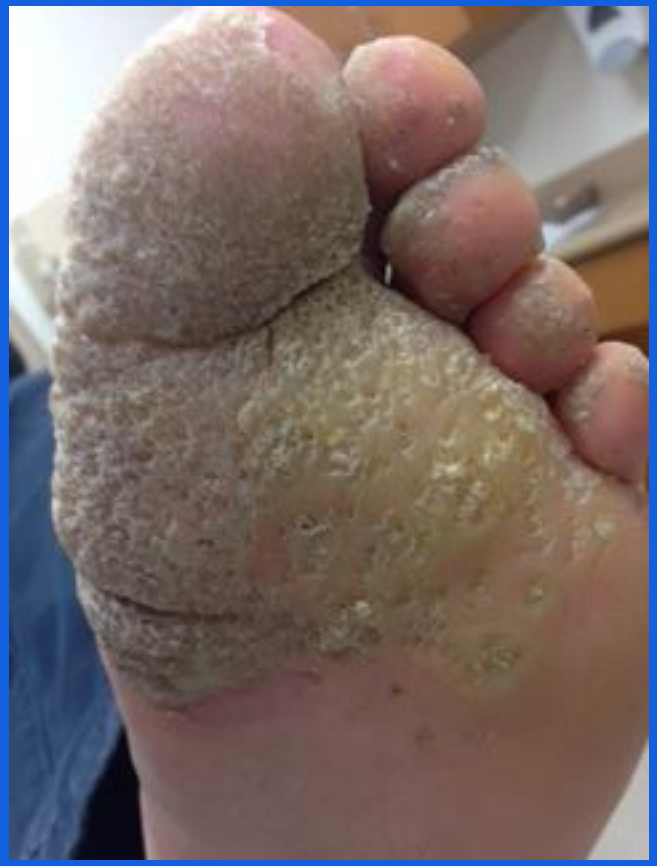
I am embarrassed



Severe Combined immunodeficiency Syndrome SCID

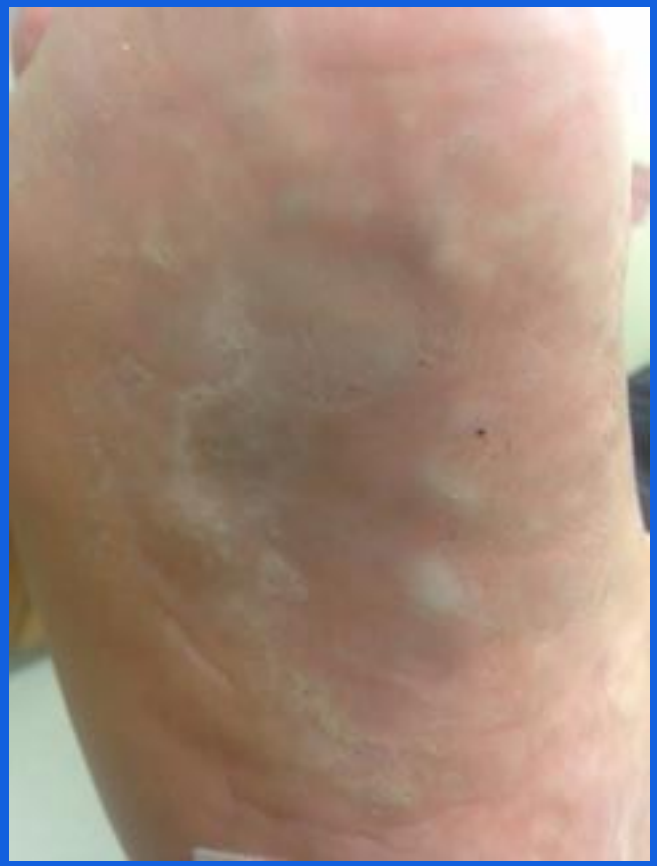
A potentially fatal primary immunodeficiency in which there is combined absence of T-lymphocyte and B-lymphocyte function. Stem cell transplant can be curative

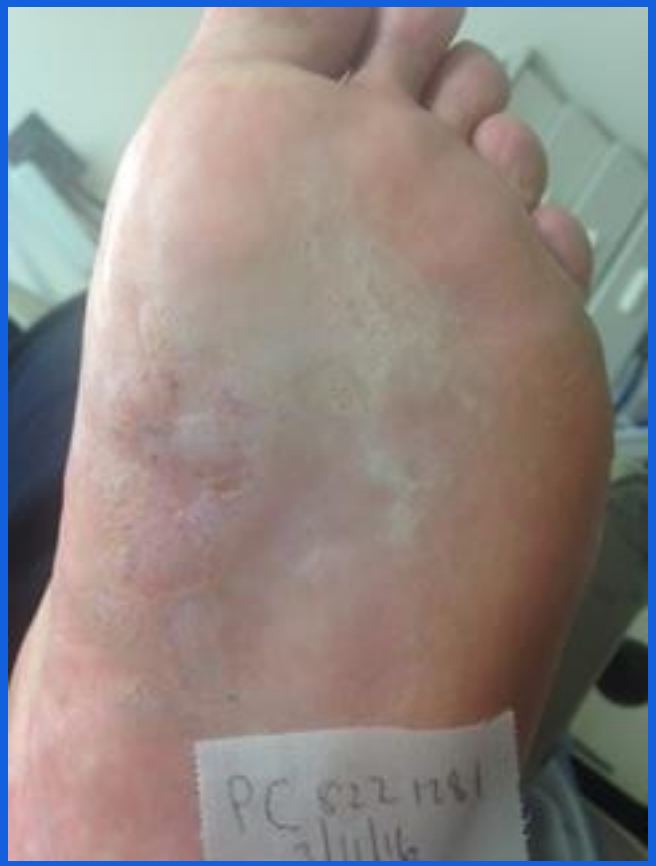




LSEA – rare on feet

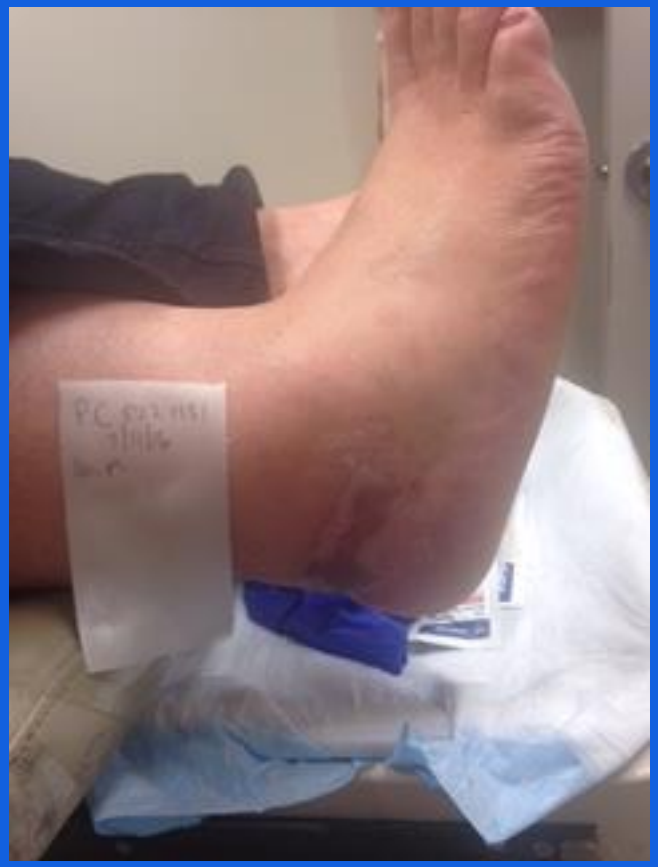
Lichen sclerosus et atrophicus (LSEA) is a chronic, inflammatory, mucocutaneous disorder of genital and extragenital skin. LS is a debilitating disease, causing itch, pain, dysuria and restriction of micturition, dyspareunia, and sexual dysfunction

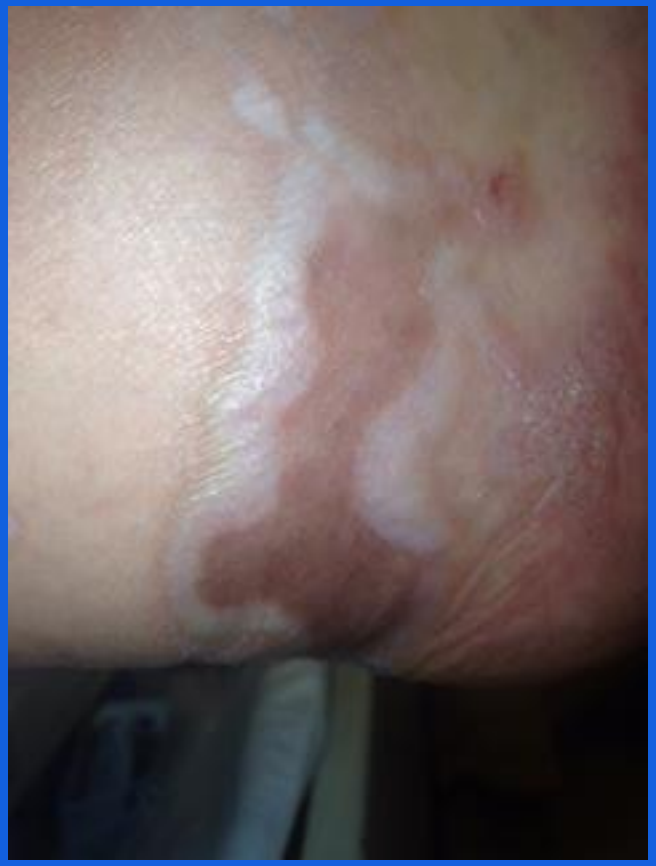




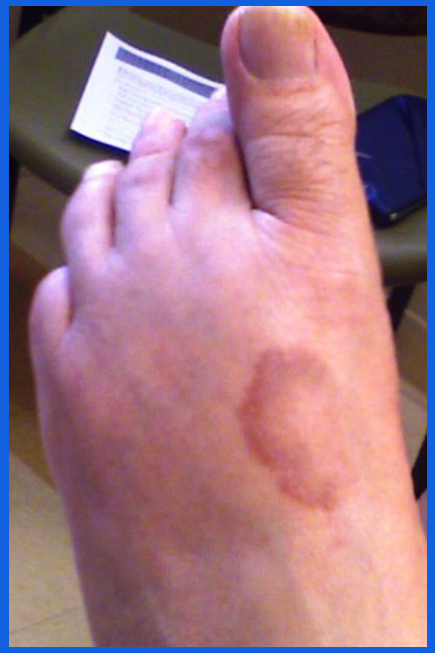
LSEA – rare on feet

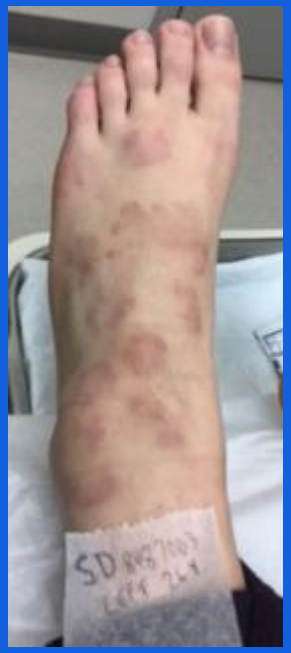
Lichen sclerosus et atrophicus (LSEA) is a chronic, inflammatory, mucocutaneous disorder of genital and extragenital skin. LS is a debilitating disease, causing itch, pain, dysuria and restriction of micturition, dyspareunia, and sexual dysfunction

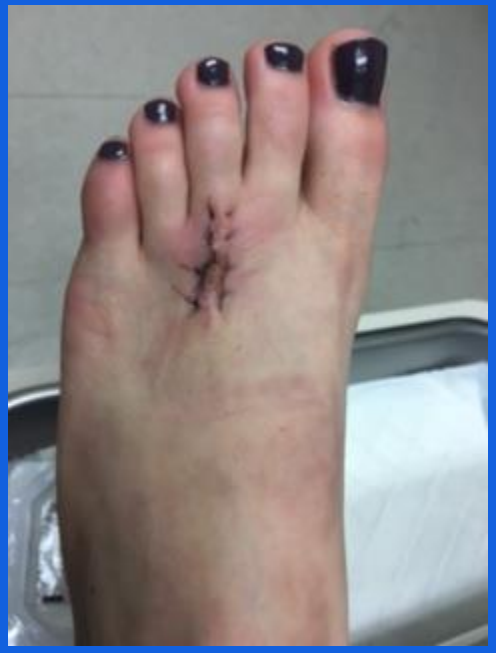




Granuloma annulare







Subcutaneous form

JAAD
Journal of the American Academy of Dermatology

Resolution of patch-type granuloma annulare lesions after biopsy☆☆☆★

Nikki A. Levin, MD, PhD[a], James W. Patterson, MD[a,b], Luke L. Yaoc, Barbara B. Wilson, MD[a]

Charlottesville, Virginia

From the Departments of Dermatology[a] and Pathology[b] and the School of Medicine,[c] University of Virginia Health Sciences Center

Resolution of patch-type granuloma annulare lesions after biopsy

Nikki A. Levin, MD, PhD, James W. Patterson, MD, Luke L. Yao, and Barbara B. Wilson, MD, Charlottesville, Virginia

We describe a patient with patch-type granuloma annulare whose lesions resolved after biopsy on 2 occasions. The lesions not subjected to biopsy persisted. There is a paucity of literature on the relation between biopsy and resolution of granuloma annulare, with one frequently cited article implying that biopsy is not related to resolution. We briefly consider possible mechanisms through which involution of lesions of granuloma annulare could result after biopsy or other form of trauma. (J Am Acad Dermatol 2002;46:426-9

Granuloma anular diseminado con fenómeno de iatrotopismo. Comunicación de un caso

Dra. Larissa López,* Dr. Alberto Ramos Garibay,** Dr. Amed Jaidar Monter***

RESUMEN

El granuloma anular es una lesión inflamatoria benigna, cuya patogenia no ha sido claramente establecida. Se asocia a múltiples factores, principalmente neuroendocrinos y como síndrome paraneoplásico. Se han descrito cuatro variedades clínicas, siendo la forma diseminada menos frecuente que la forma localizada. Presentamos el caso de una paciente de sexo femenino con un granuloma anular diseminado con fenómeno de iatrotopismo.

Palabras clave: Granuloma anular, iatrotopismo.

ABSTRACT

Granuloma annulare (GA) is a benign inflammatory dermatosis whose precise etiology is still unknown. It has been associated with multiple factors principally neuroendocryns and as paraneoplasic syndrome and have been described four clinical variants being spread form less frequent than localizated form. We present the case of a patient of feminine sex with a spread granuloma annulare and iatrotopic response.

Key words: Granuloma annulare, iatrotopic response.

INTRODUCCIÓN

El granuloma anular (GA) es una dermatosis, autolimitada, crónica y benigna, de etiología desconocida, caracterizada por una inflamación granulomatosa de la dermis. Representa un motivo de consulta frecuente, más que por su trascendencia clínica, por los problemas cosméticos que puede plantear al paciente, sobre todo la variante de GA diseminado.[1,2]

Fue descrito por primera vez en 1895 por T. Calcott Fox como erupción anular de los dedos de las manos; sin embargo, no fue sino hasta 1902 que Radcliffe-Crocker le acuñó el término actual.[1-3]

PATOGENIA

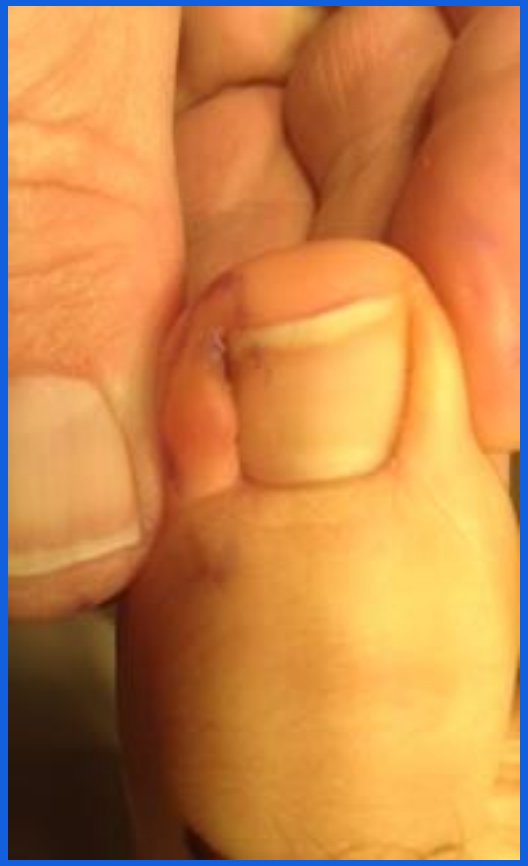
La patogénesis aún se desconoce. Se ha asociado con picadura de insectos, traumatismos, aplicación de tuberculina, exposición solar, infecciones virales por virus de hepatitis B y C, VIH, parvovirus B19 y virus herpes simple, así como tiroiditis autoinmune y neoplasias, principalmente linfoma de Hodgkin.[1-5]

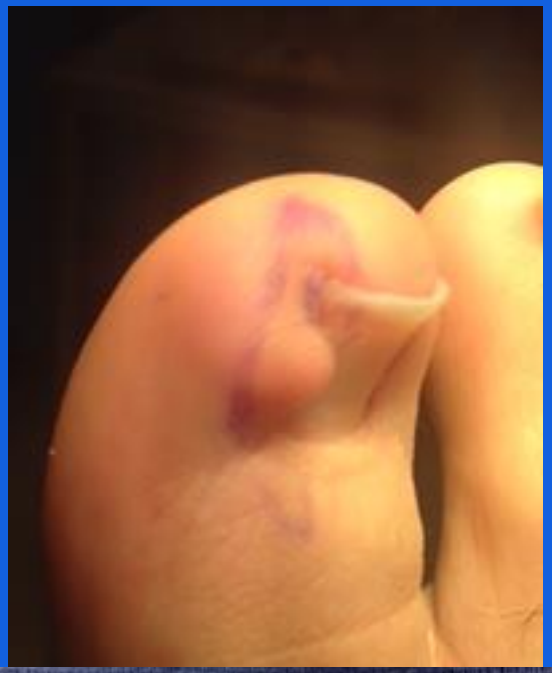
El granuloma anular generalizado se ha encontrado con mayor frecuencia en pacientes con HLA-BW35 y HLA-A29[1,2,6-8] lo que sugiere una predisposición genética. La asociación con diabetes mellitus sigue siendo controversial, Se ha observado también un mecanismo de hipersensibilidad tipo IV, lo que lleva a pensar que es una enfermedad de tipo inmunológico.[1-4] Una de las hipótesis en relación a su fisiopatogenia señala a los queratinocitos, células de Langerhans y melanocitos como responsables de esta entidad al liberar citoquinas que estimulan células inflamatorias, lo que iniciaría el depósito de proteínas de la matriz extracelular aumentando la expresión de colágena tipo I6, metaloproteinasas de la matriz por macrófagos y fibroblastos, degeneración focal de fibras elásticas y fagocitosis de material elastótico por células gigantes.[1-3,7,8]

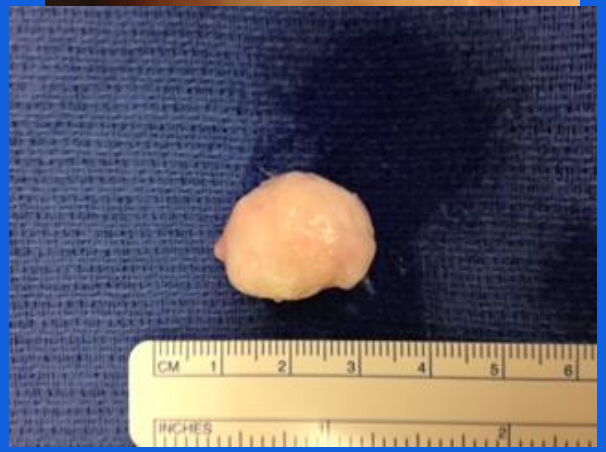
Existen cuatro formas de presentación clínica: localizada, diseminado/generalizada, perforante lineal y subcutánea.[1-4] Las lesiones se caracterizan por la presencia de nódulos eritematosos o del color de la piel, formando placas de disposición anular o arciforme. Las principales

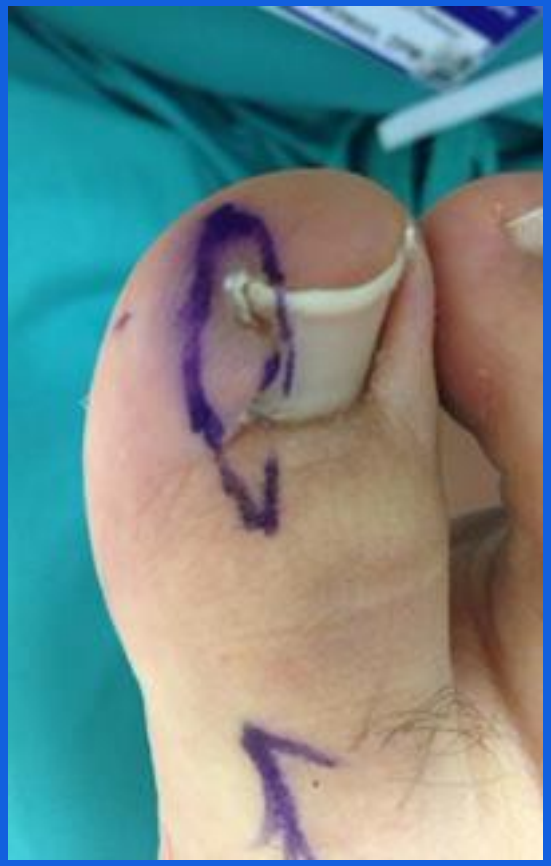
* Dermatóloga Centro Dermatológico Pascua (CDP).
** Dermatopatólogo CDP.
*** Residente 2°año Dermatología CDP.

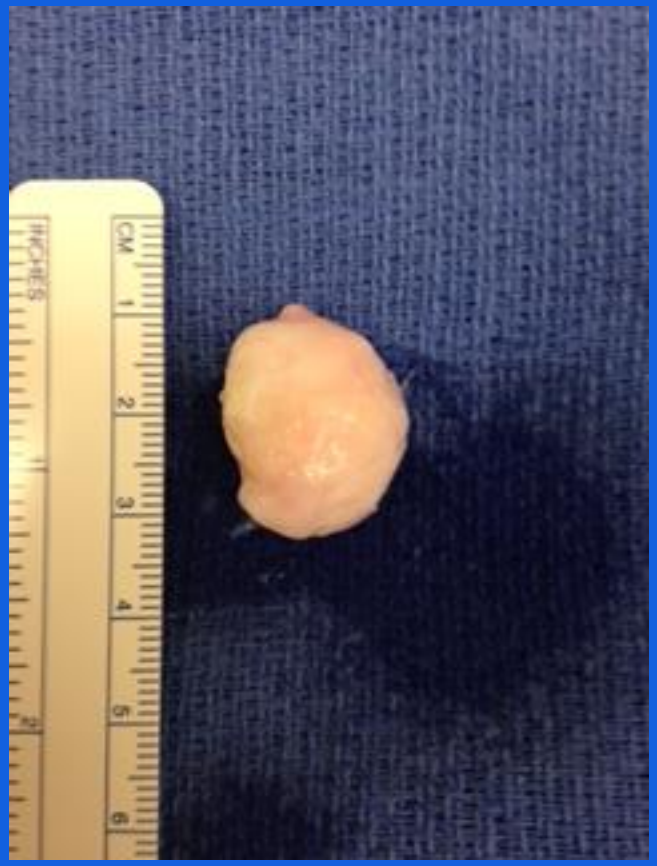
Fibroma masquerading as onychocryptosis



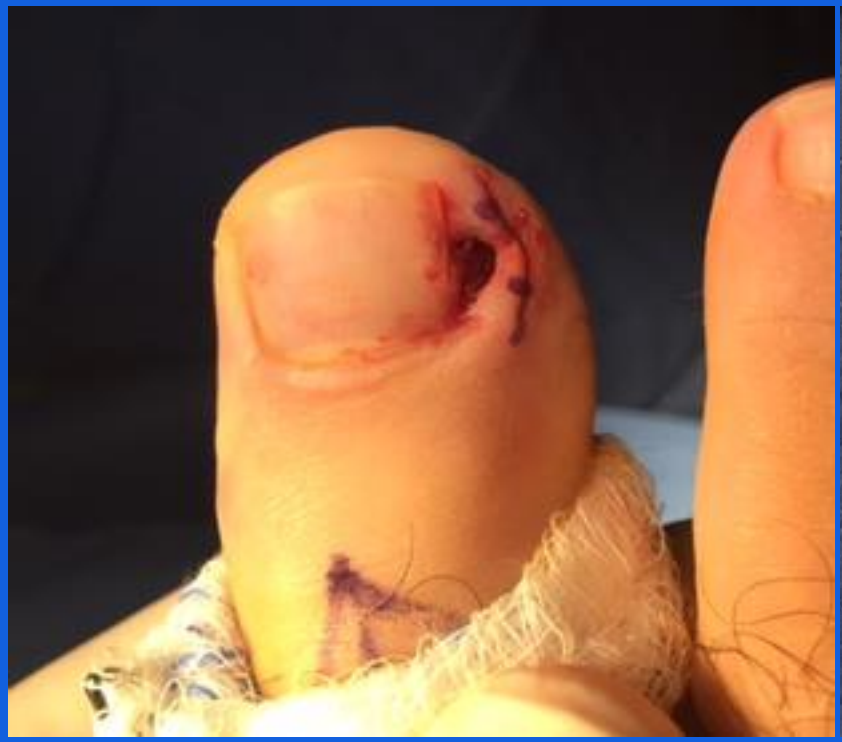


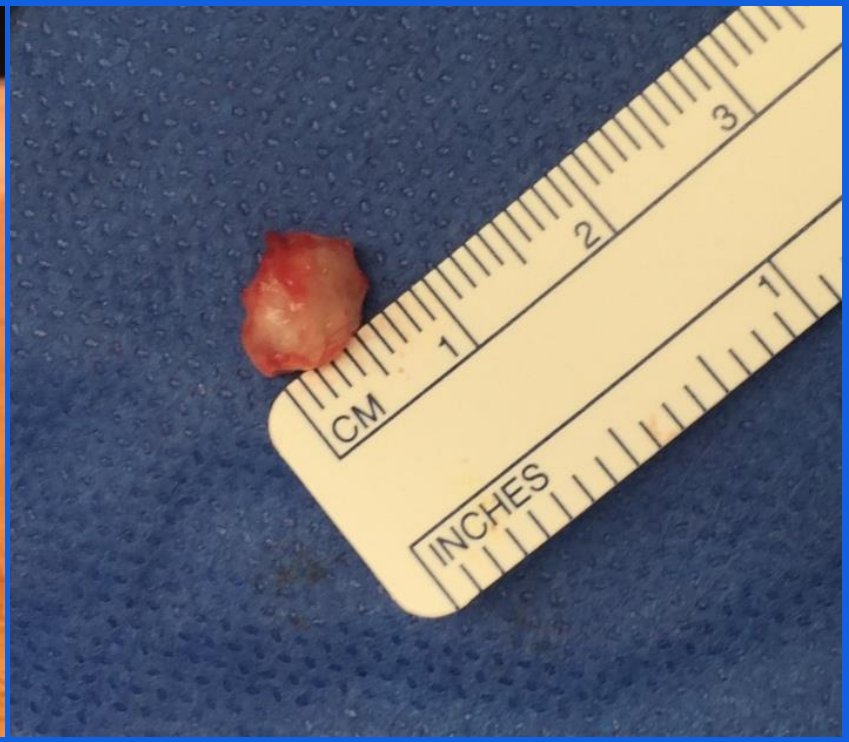




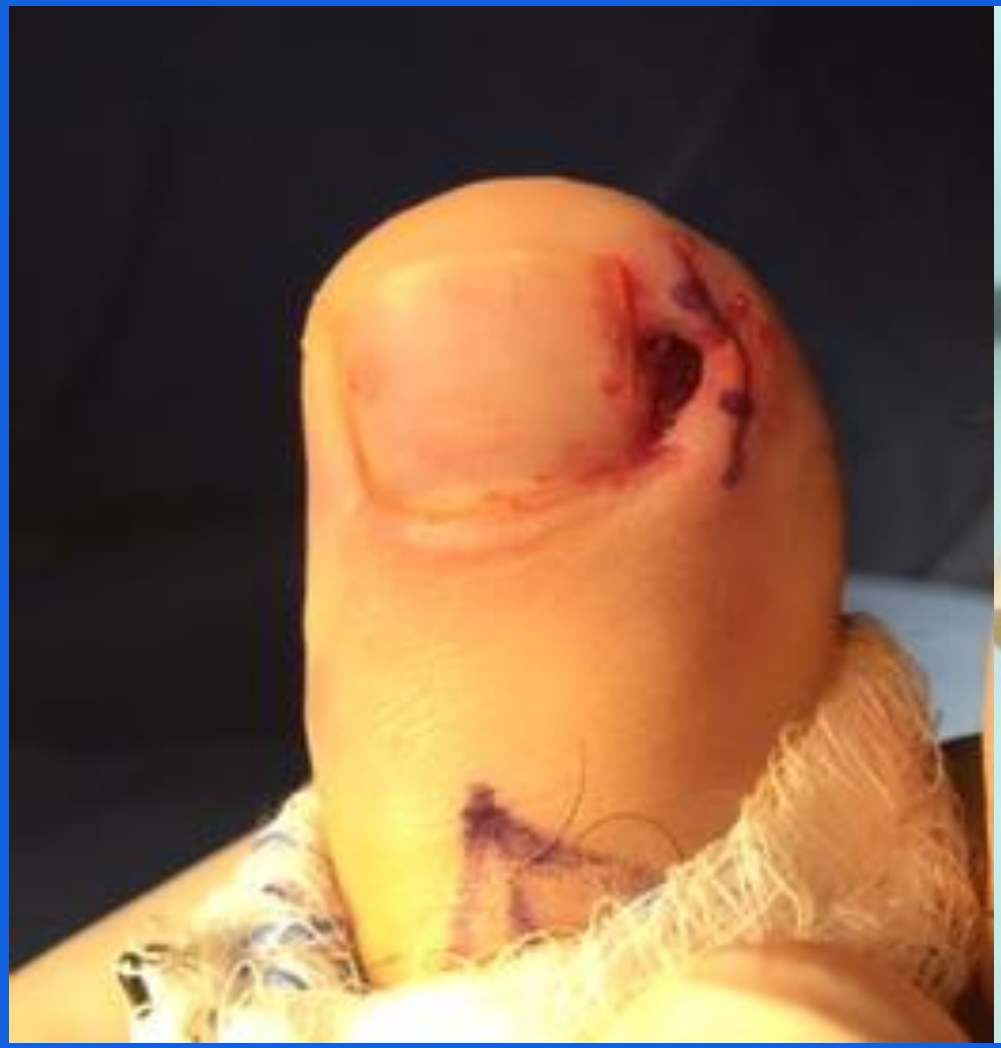

INCHES
CM
1
2
3
4
5
6

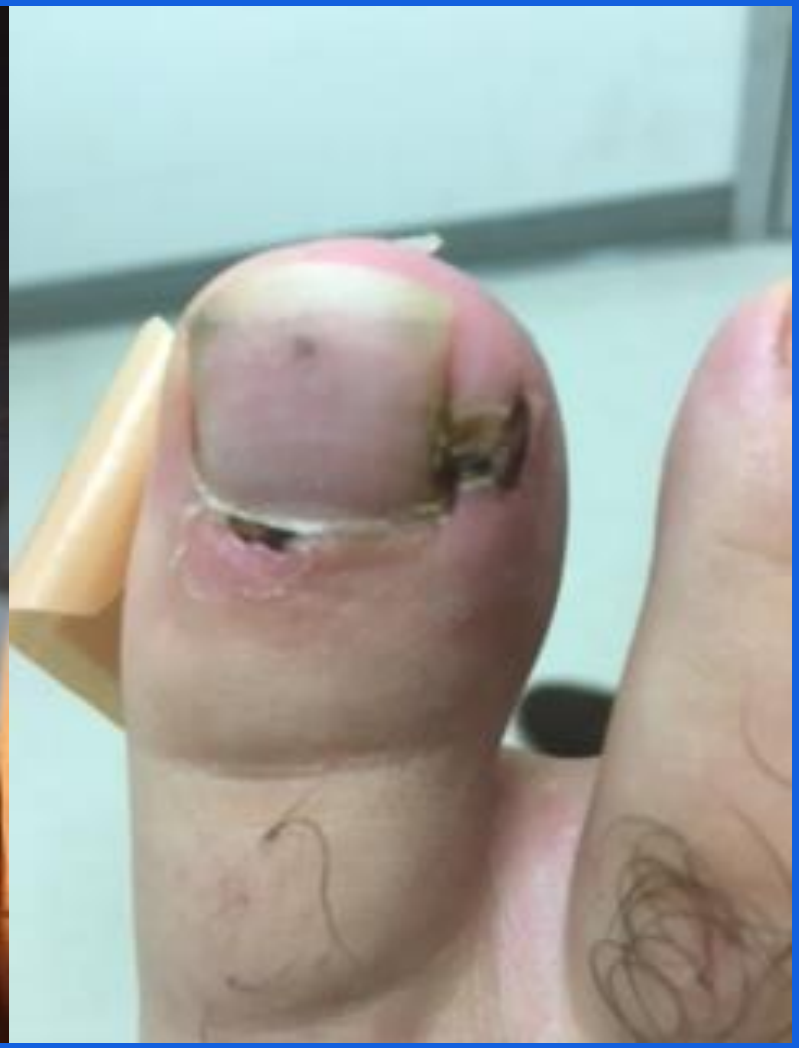
Fibroma masquerading as onychocryptosis

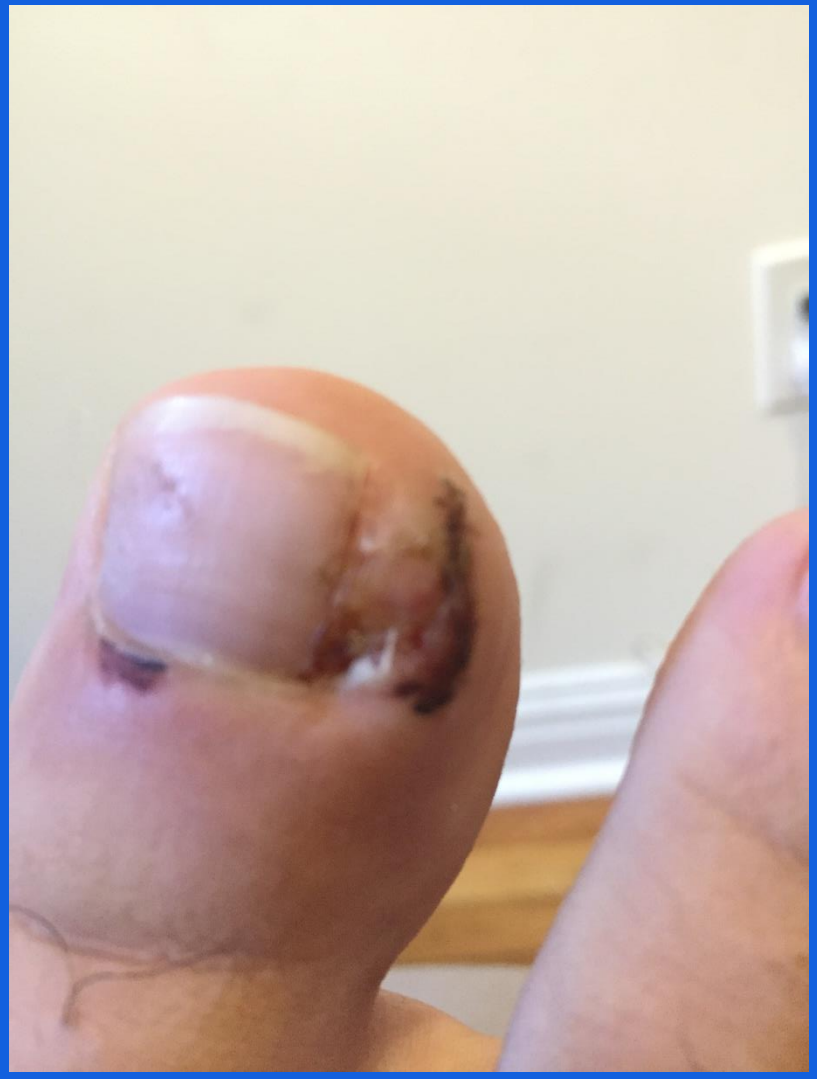




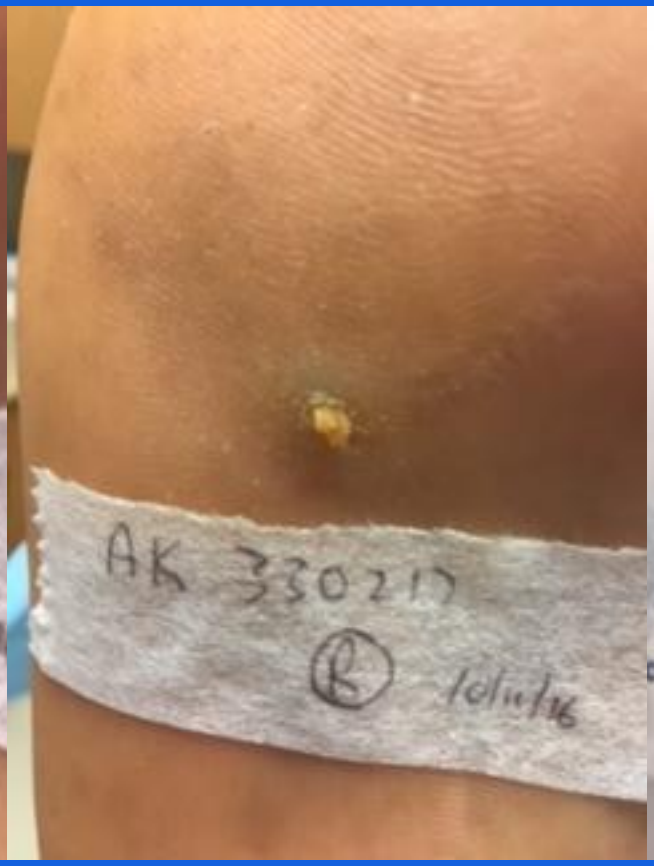
Fibroma masquerading as onychocryptosis

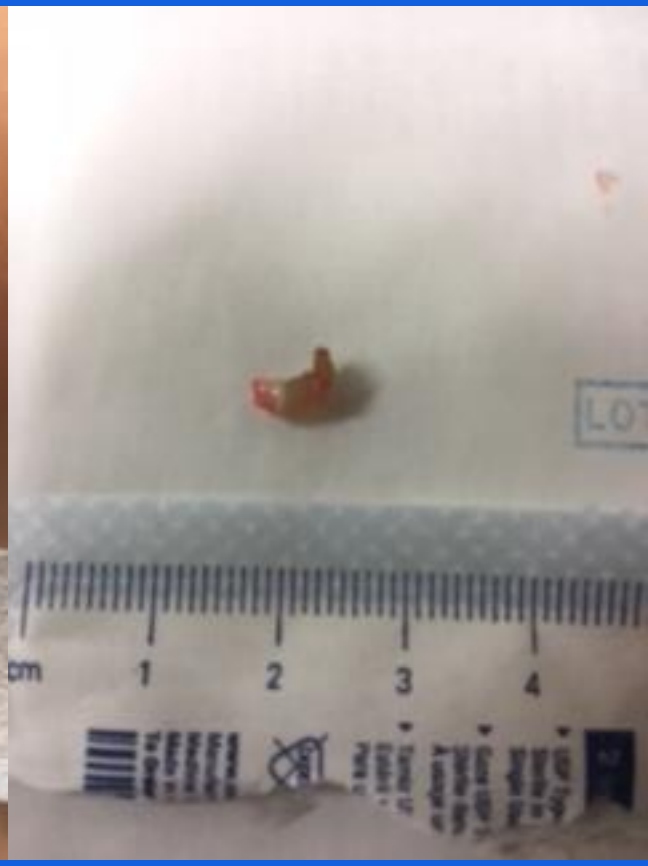




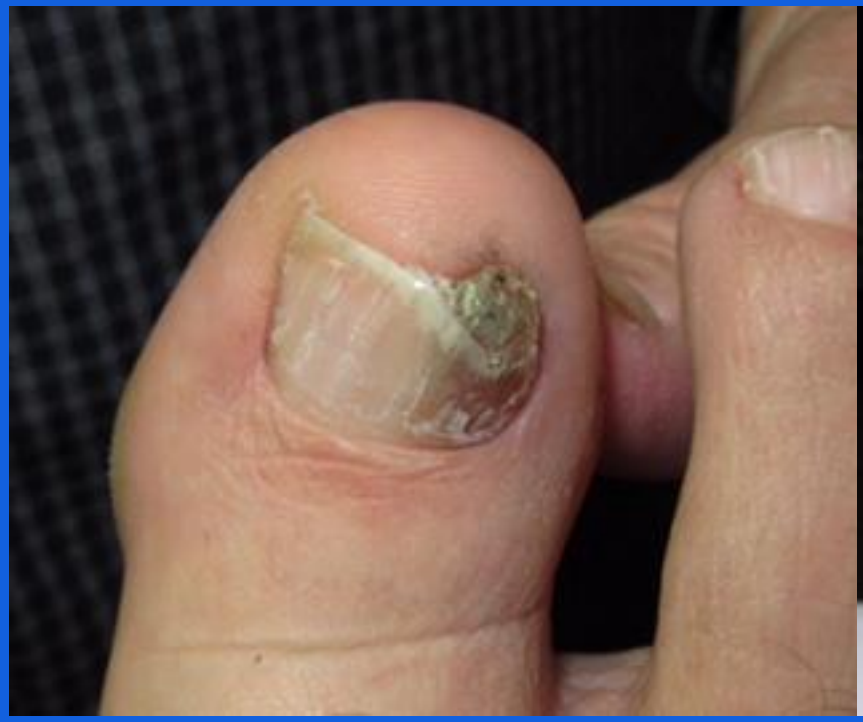


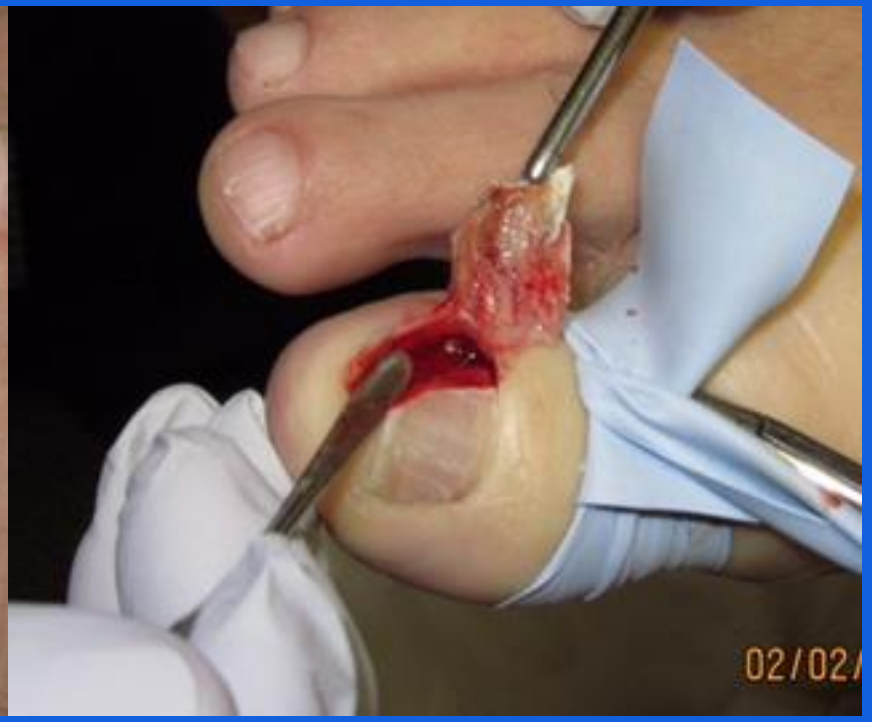
Cutaneous Horn





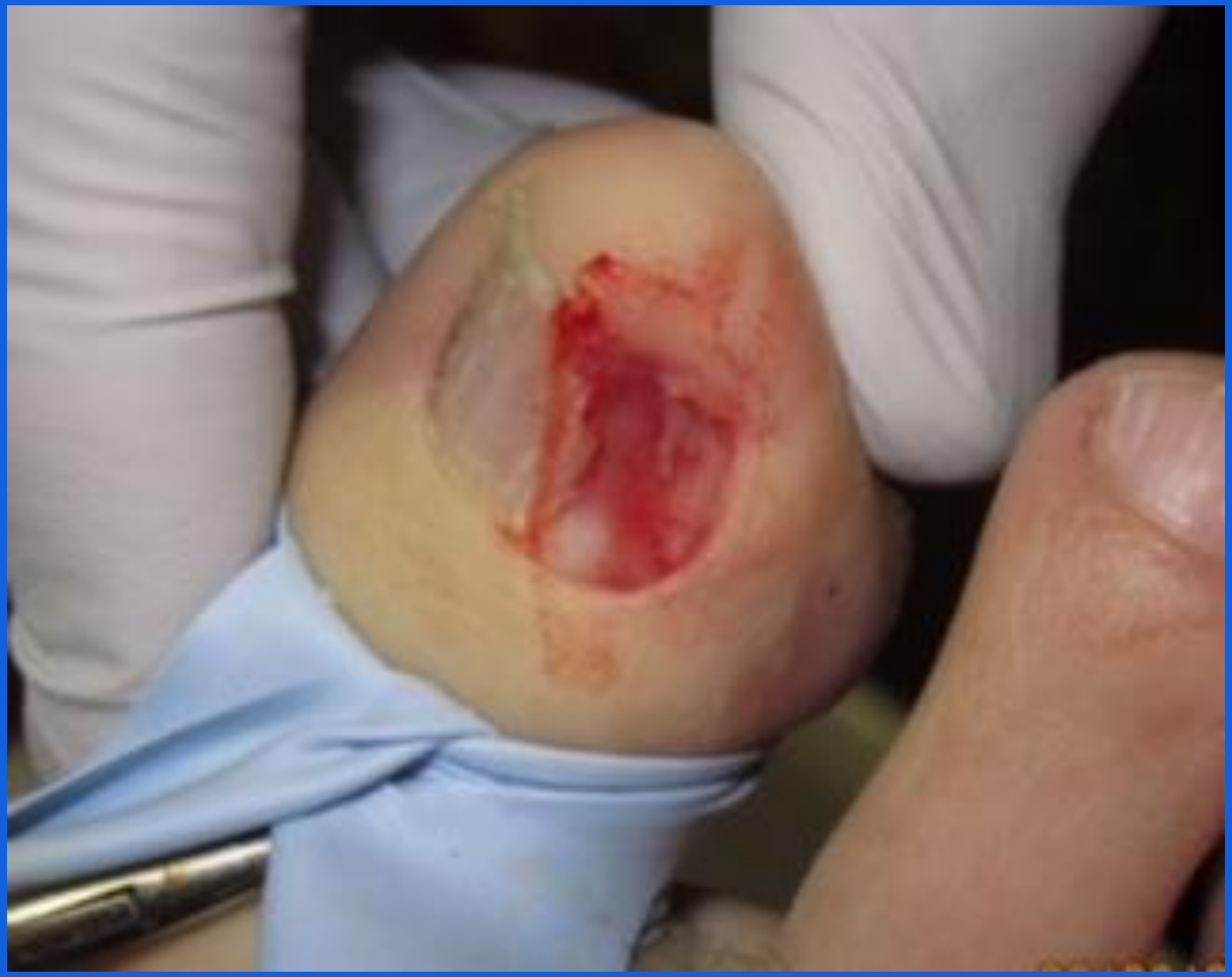
Subungual Keratotic Lesion

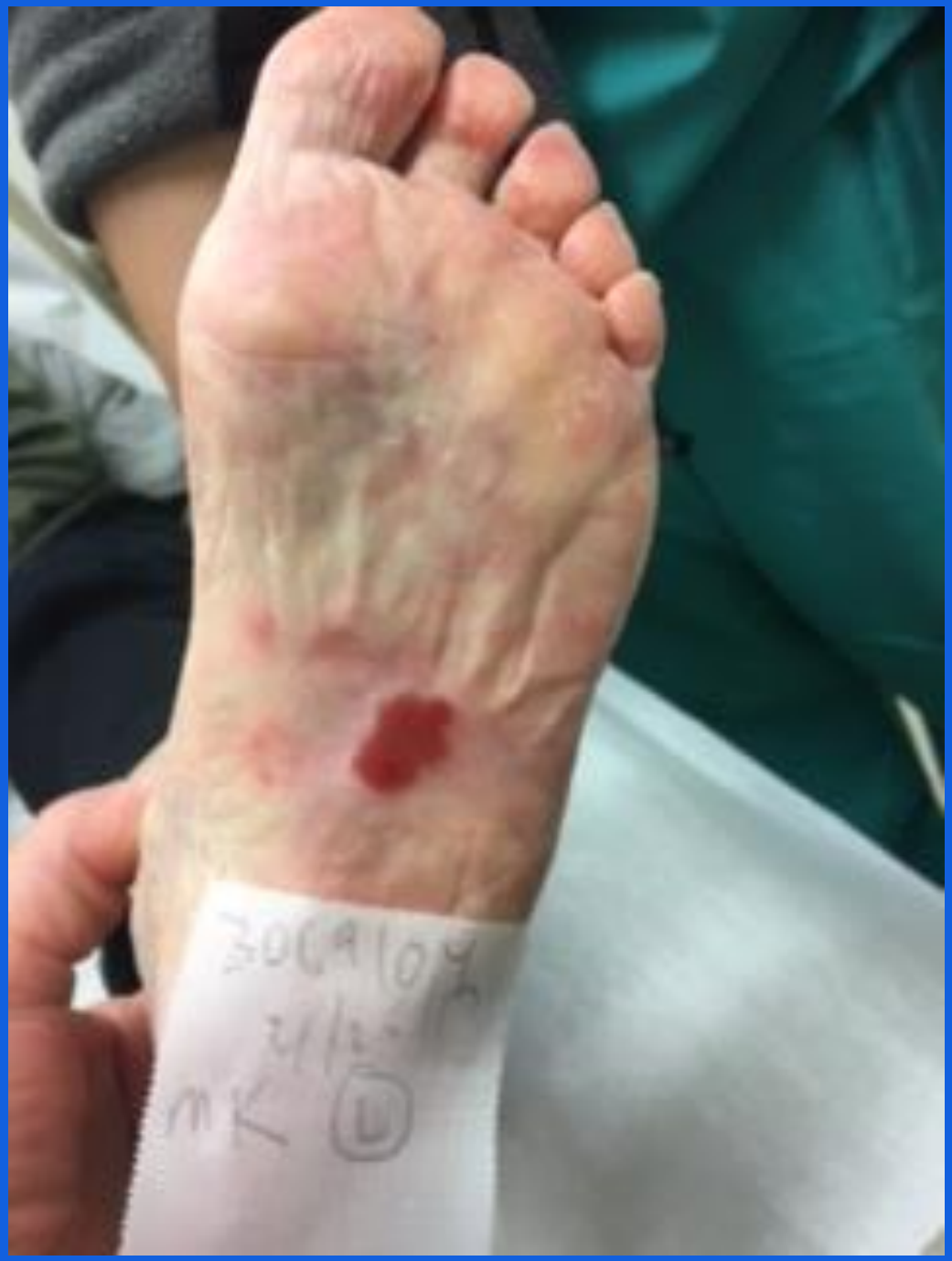




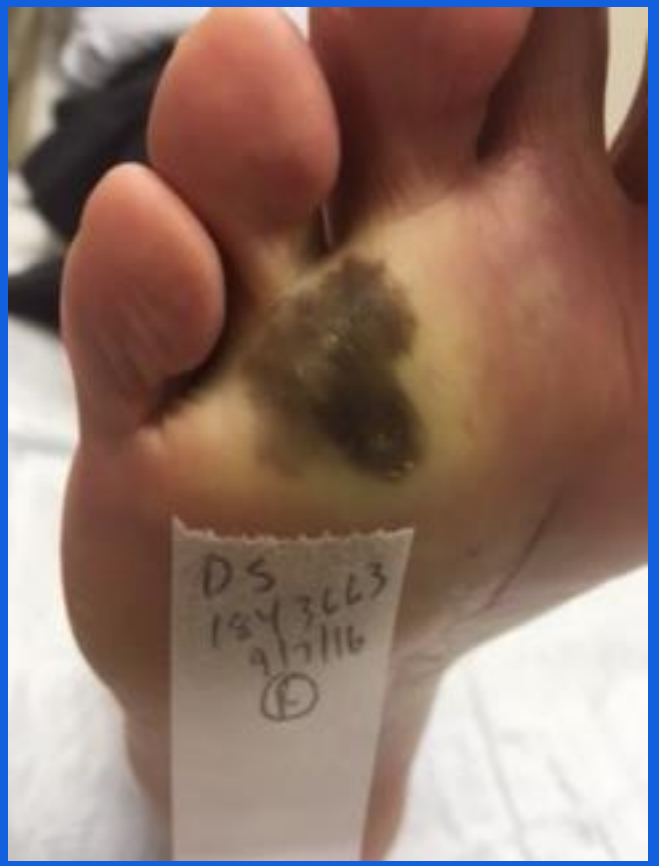
Definitive sx?

Mohs Surgery

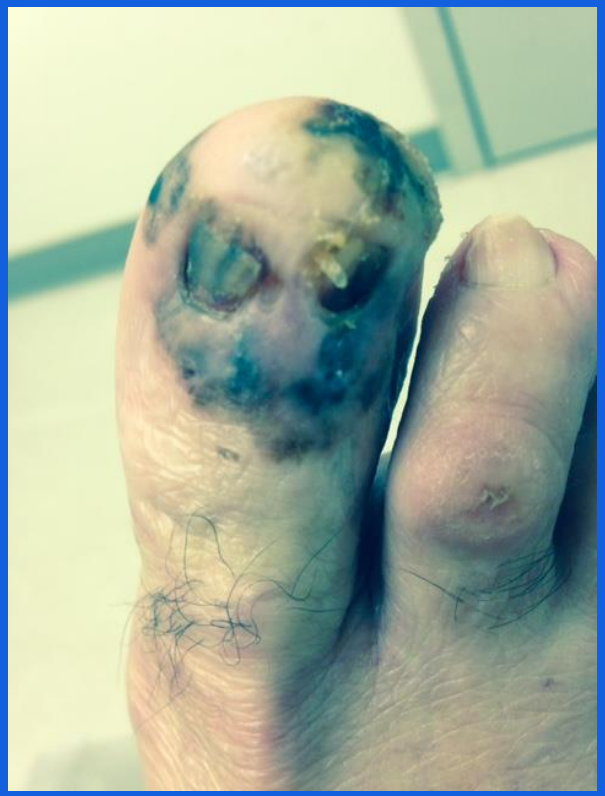


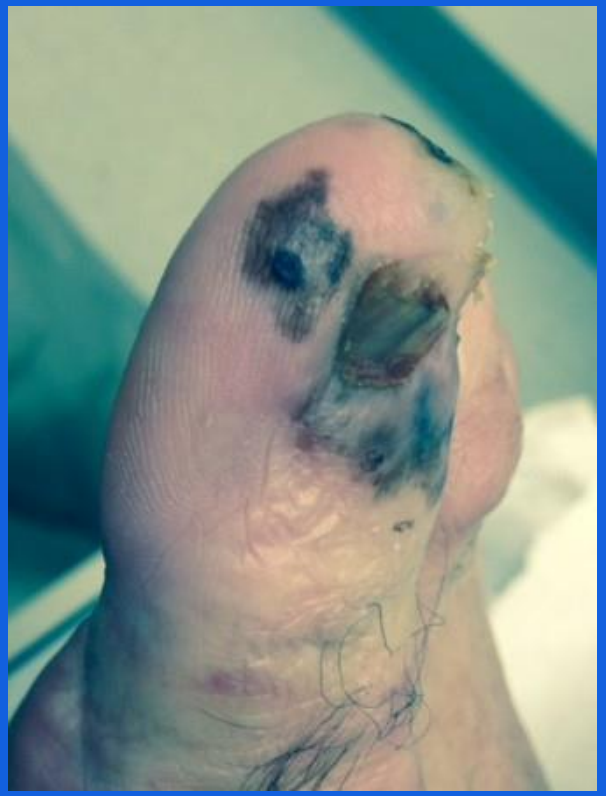


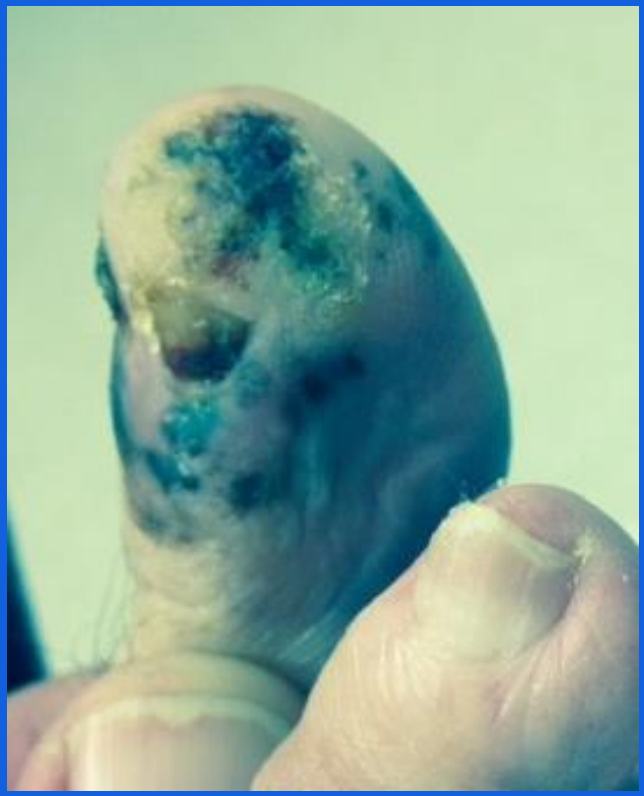
Large Suspicious Pigmented Lesion



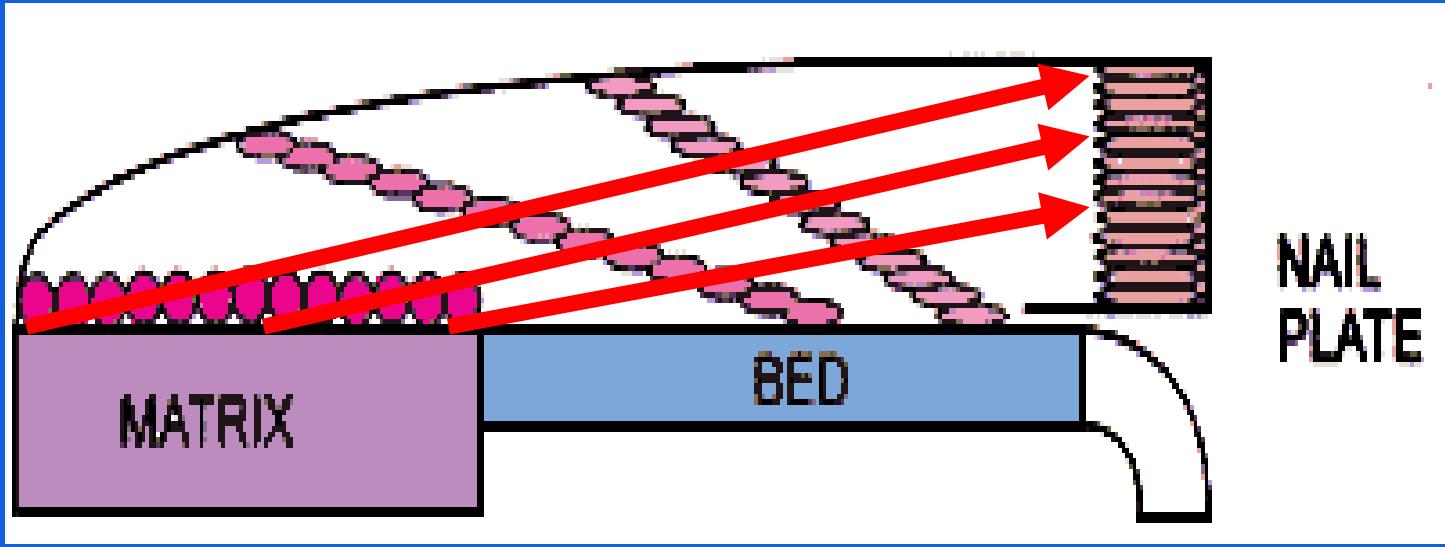
History of trauma resulting in 4 year delay in diagnosis





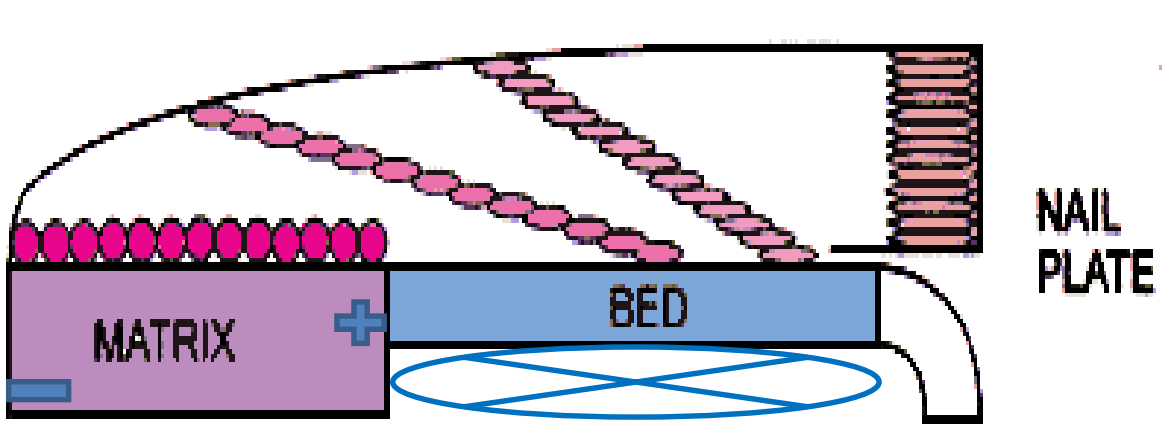


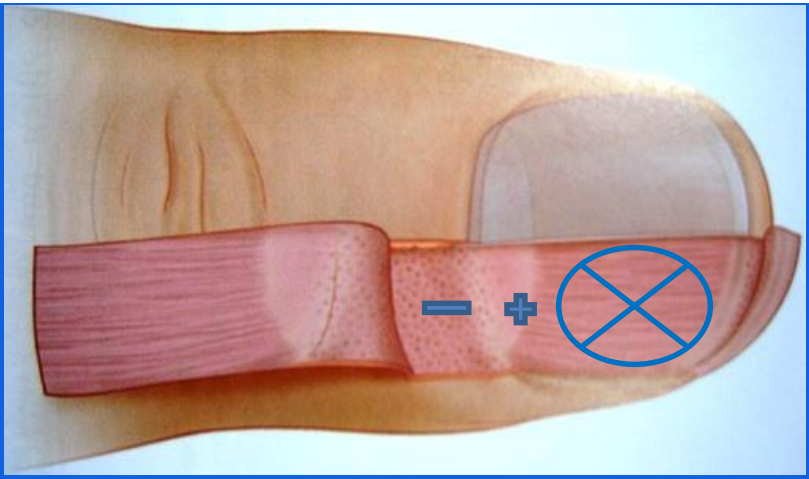
Nail Growth Mechanics



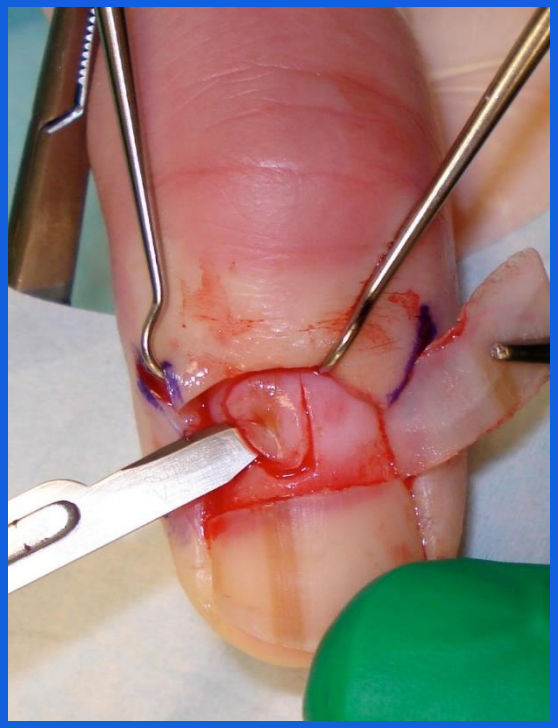
Long Matrix = thicker nail plate

Relative melanocyte synthesis and location in nail unit

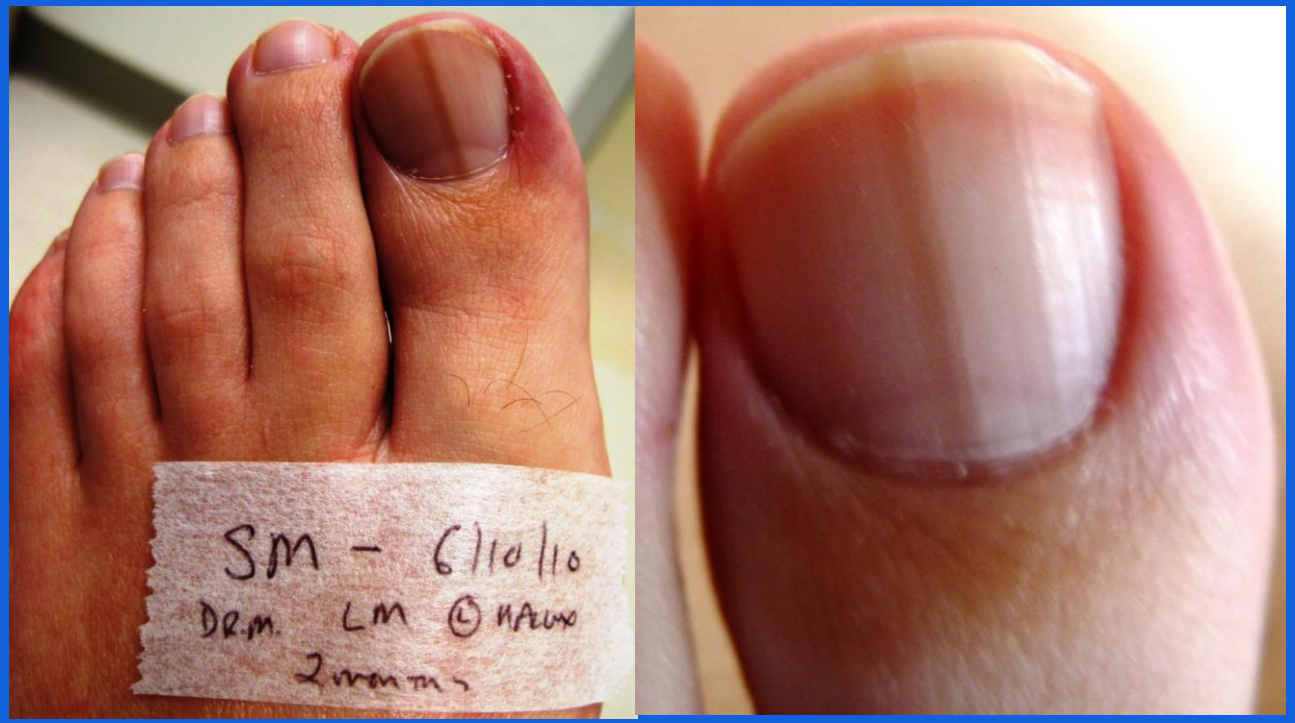




Blade position for tangential excision of the matrix lesion

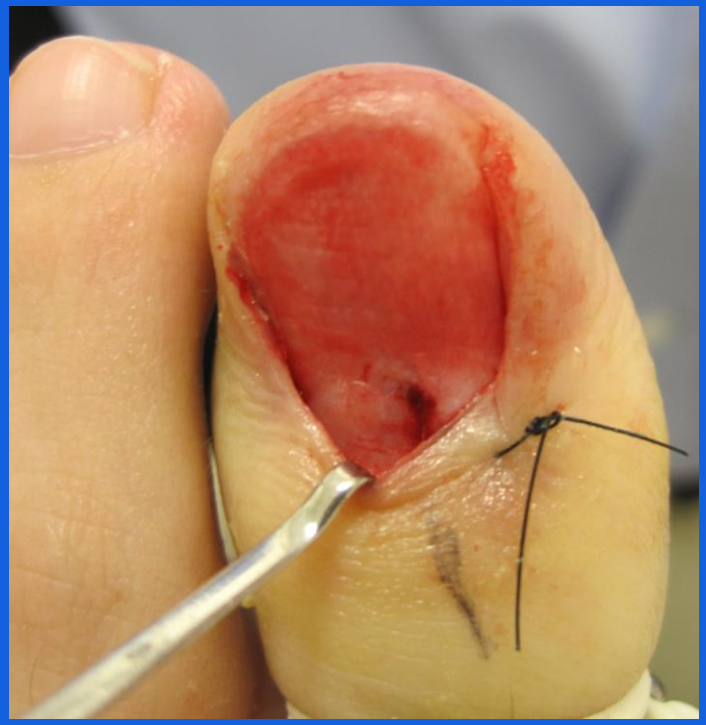


Longitudinal Melanonychia

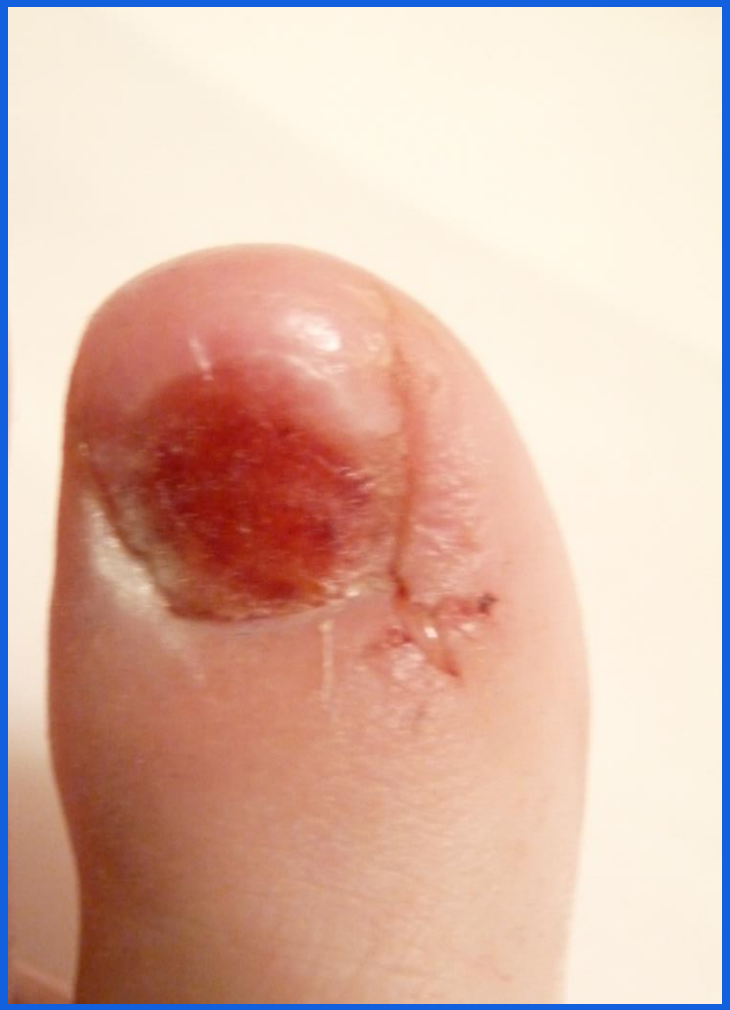


Specimen showing dorsal concentration of pigment

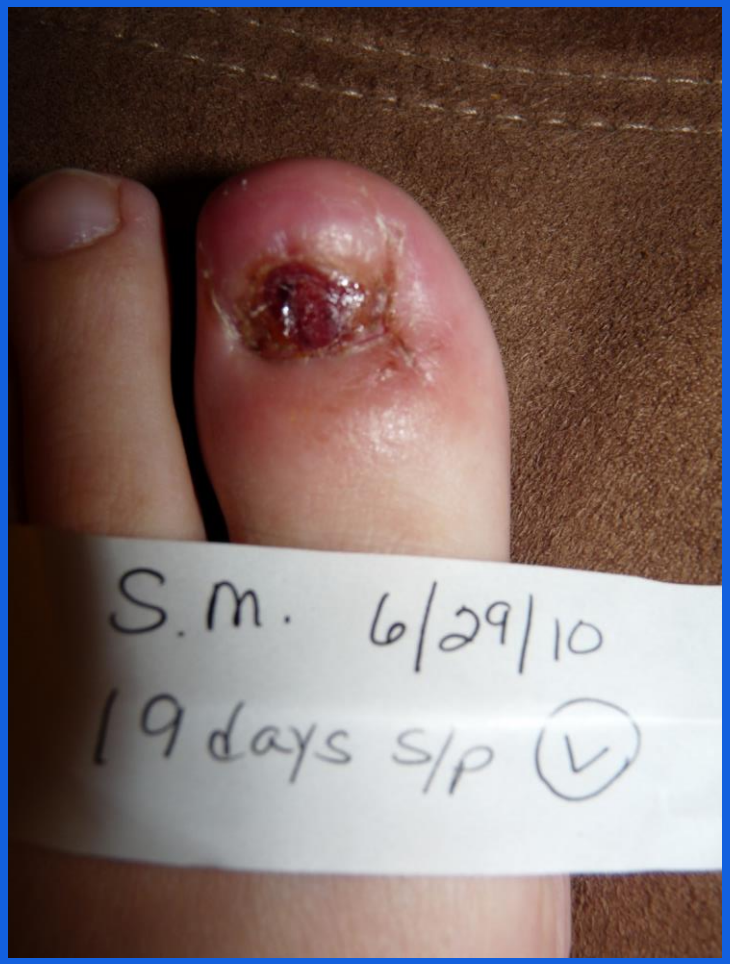
Immediate Post-Op Matrix Shave Technique



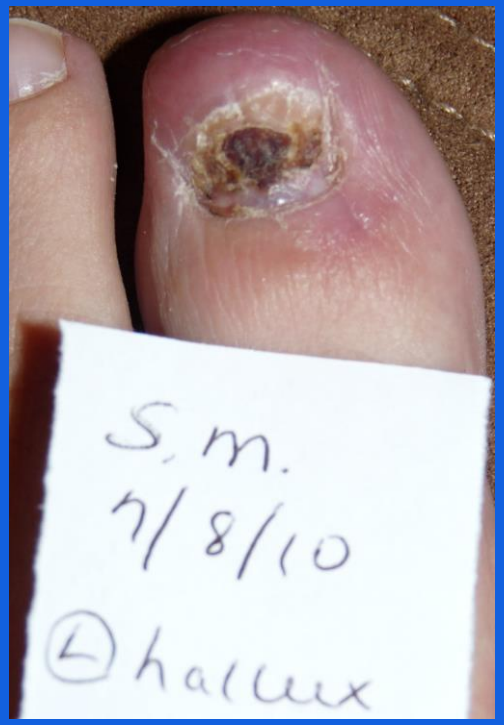
11 Days Post-Op



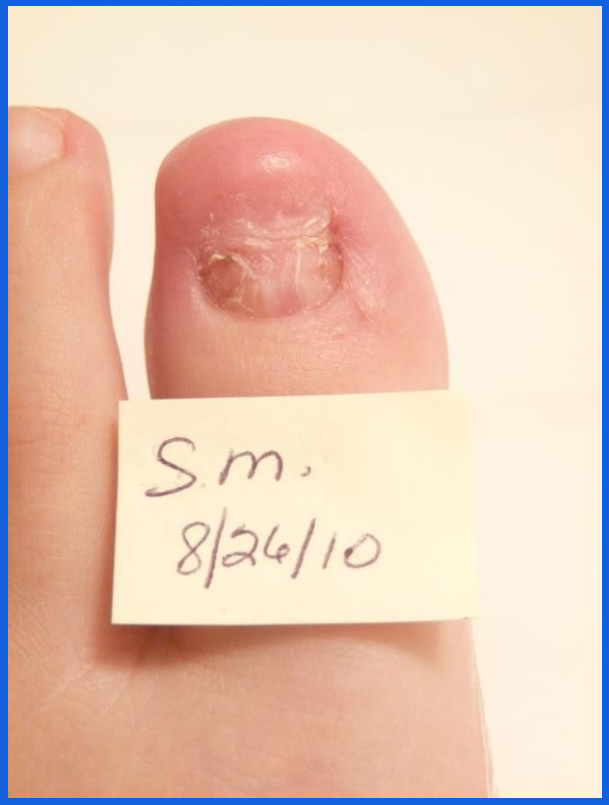
19 Days Post-Op



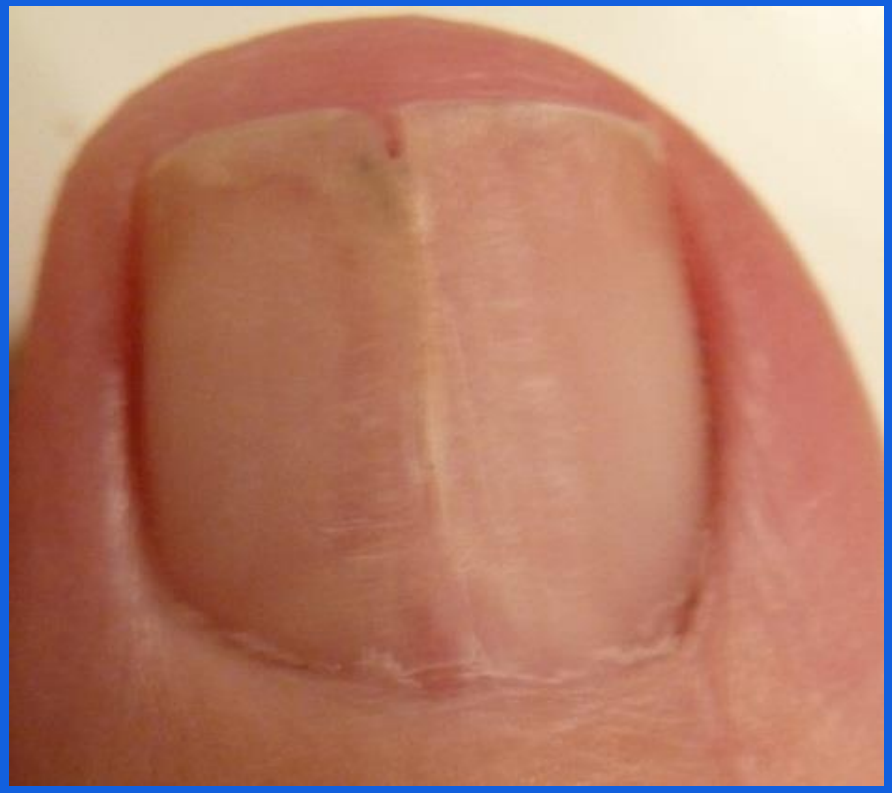
29 Days Post-Op



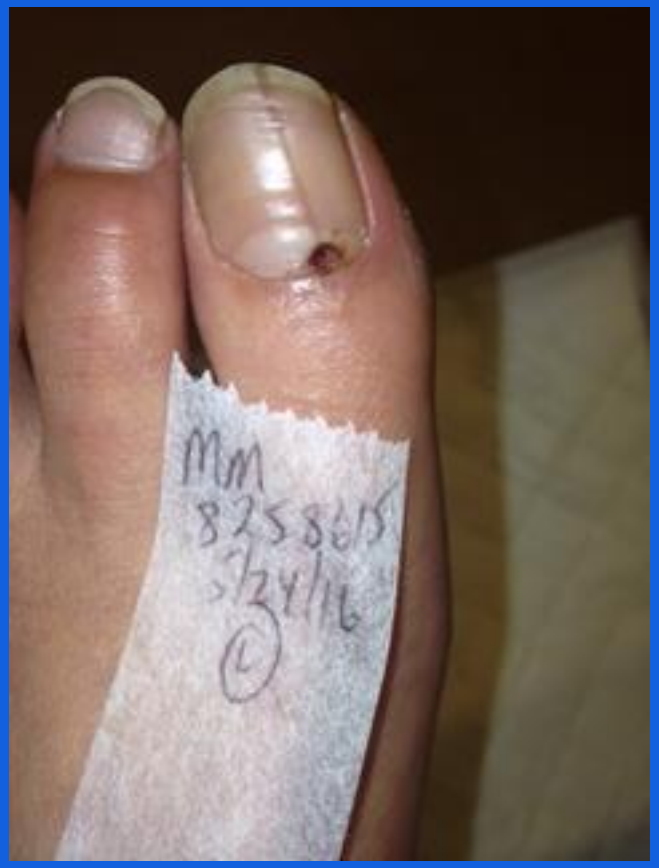
78 Days Post-Op
Streak resolved

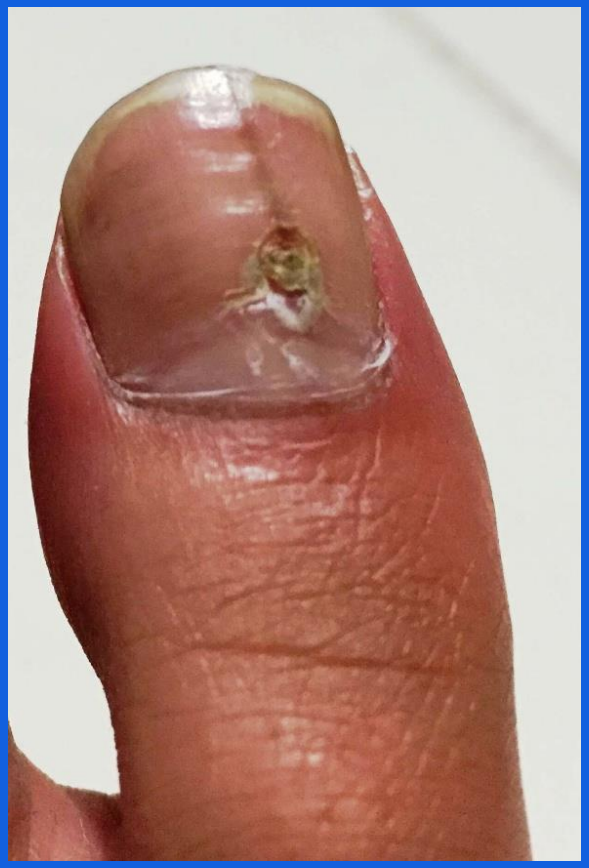


One year post-op

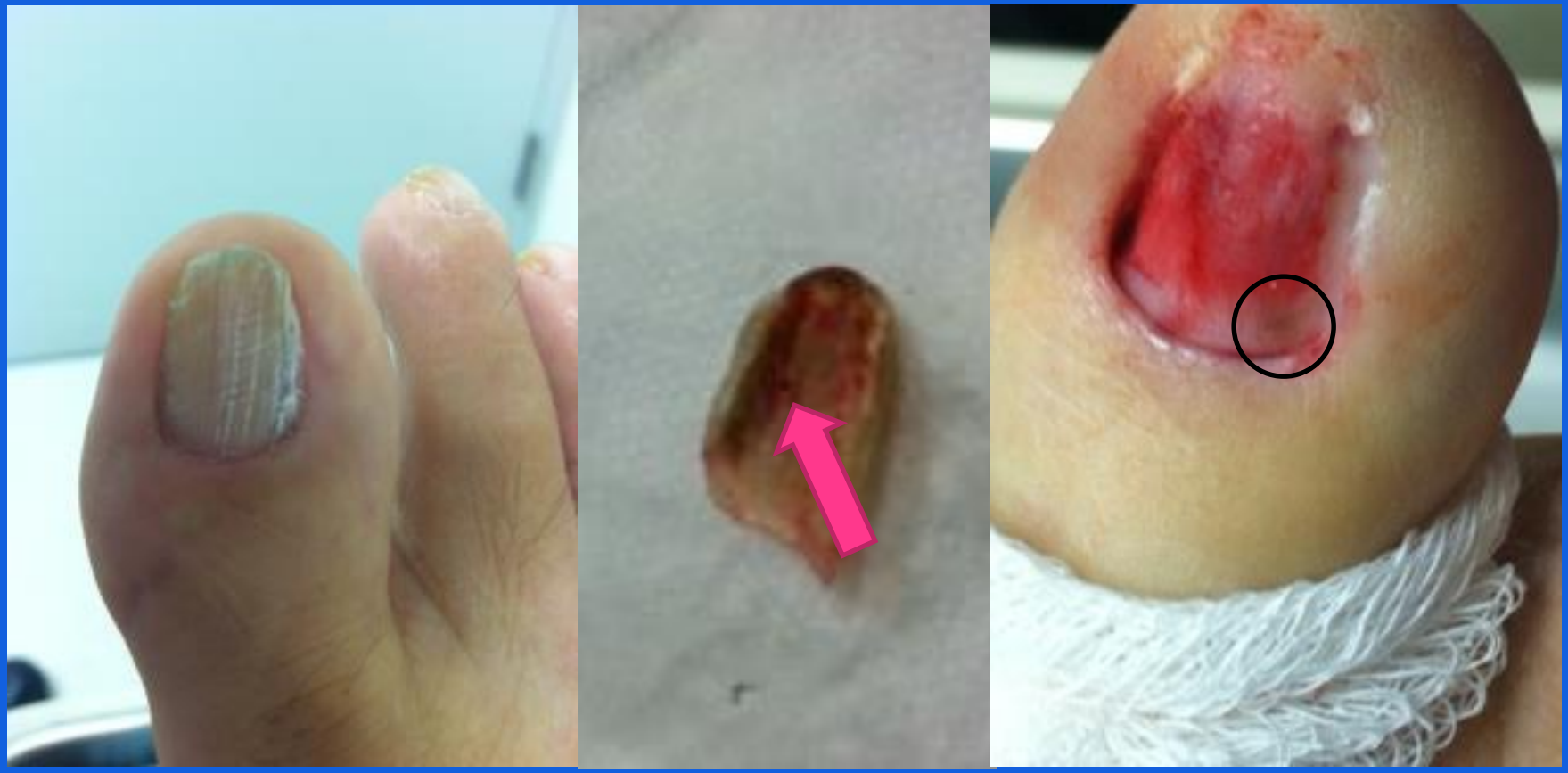


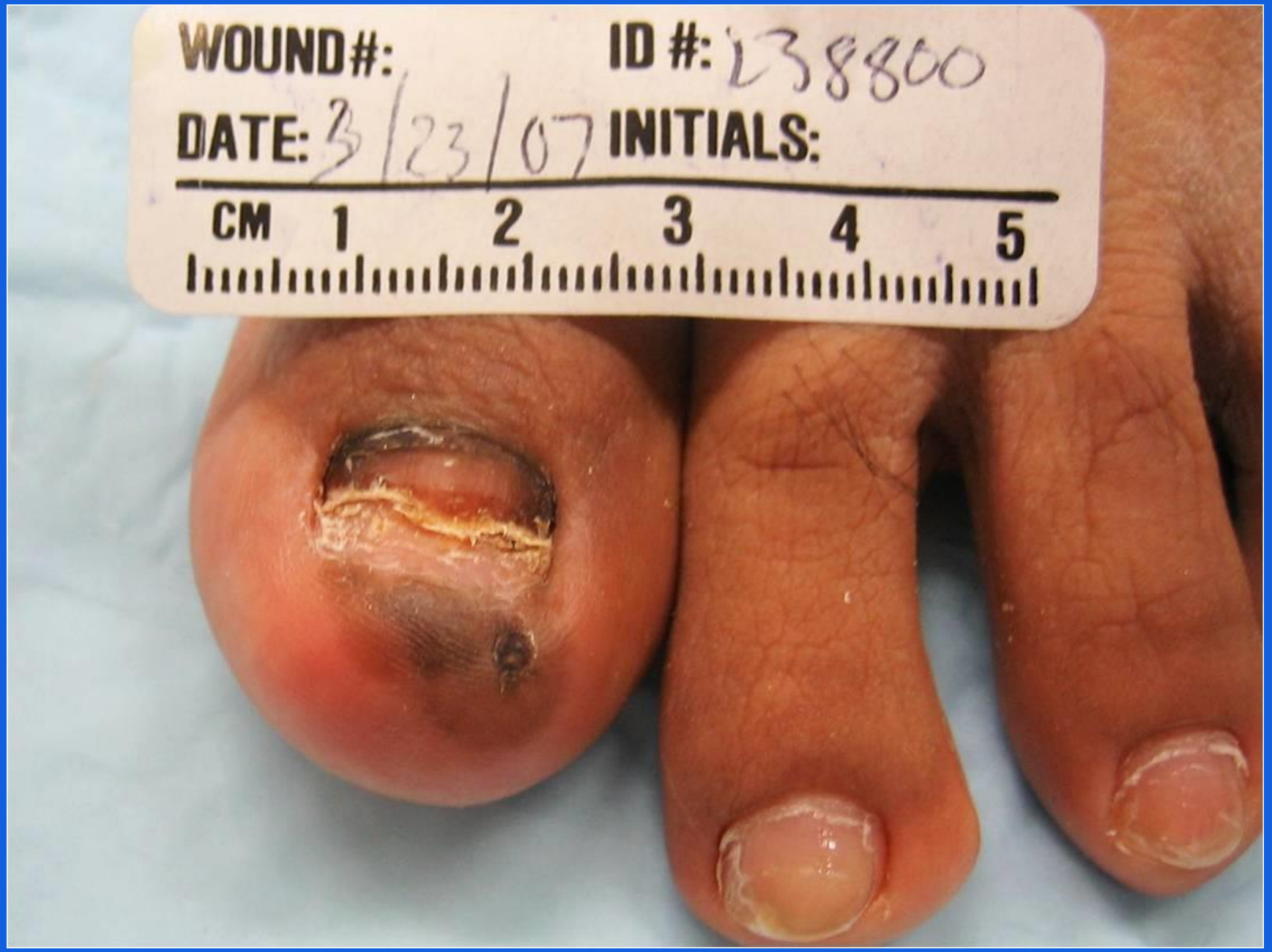
Biopsy of LM and Growth Disturbance ?



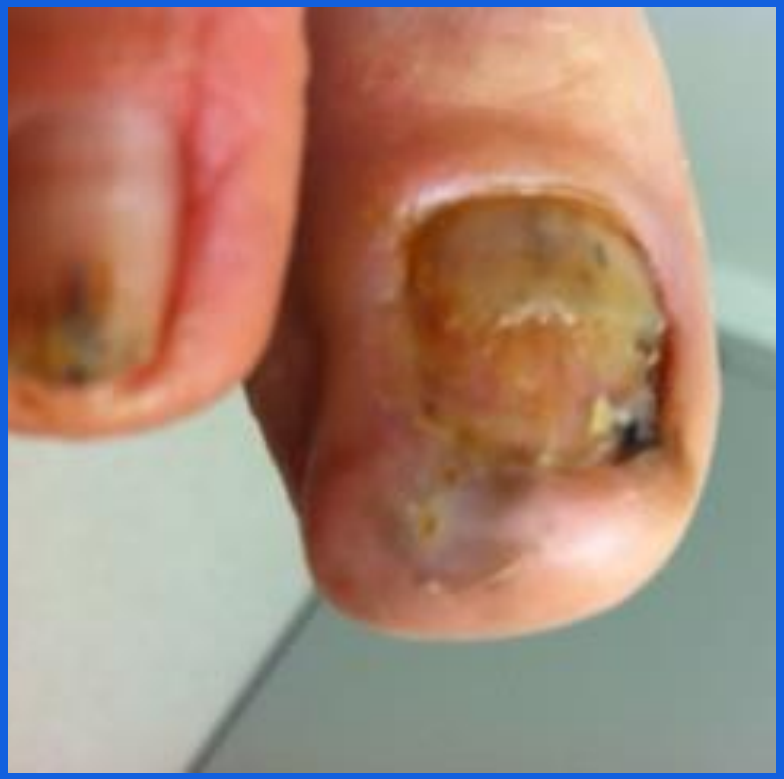


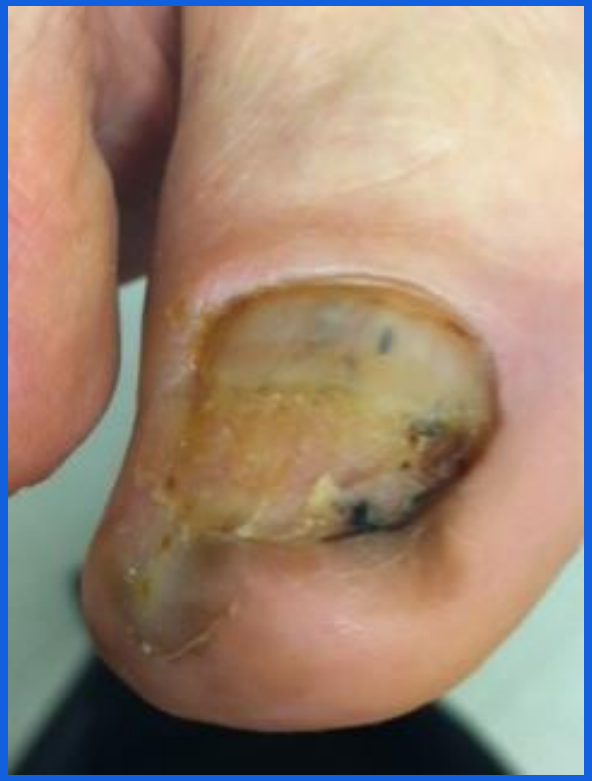
Deep ventral pigmentation



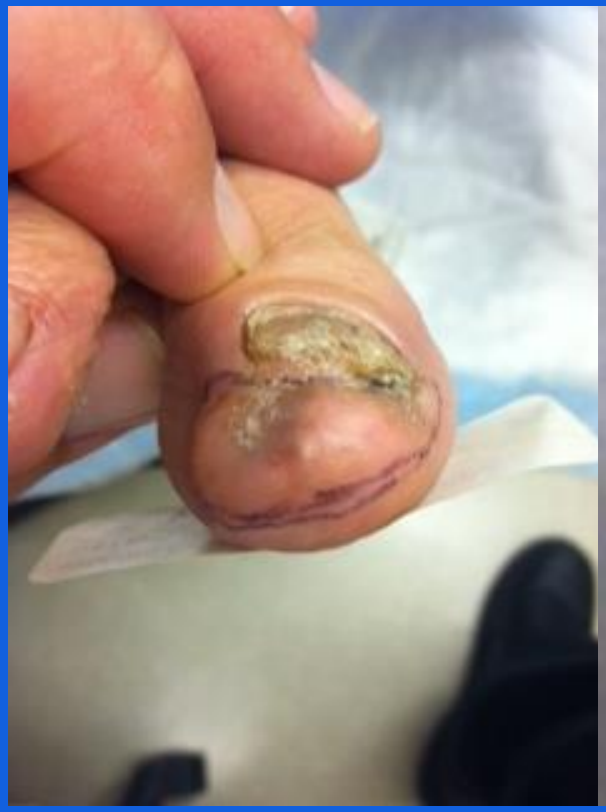

WOUND#:
ID #: 238800
DATE: 3/23/07
INITIALS:
CM 1 2 3 4 5

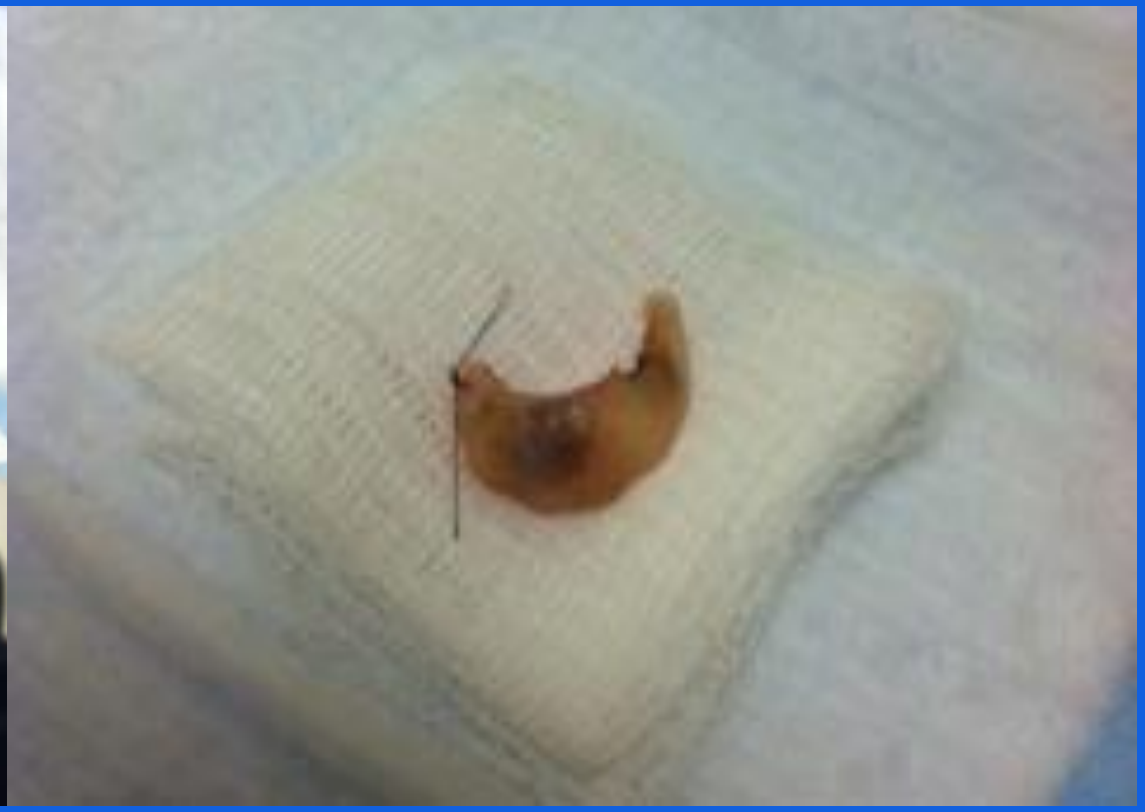
In Situ Melanoma – Punch Bx





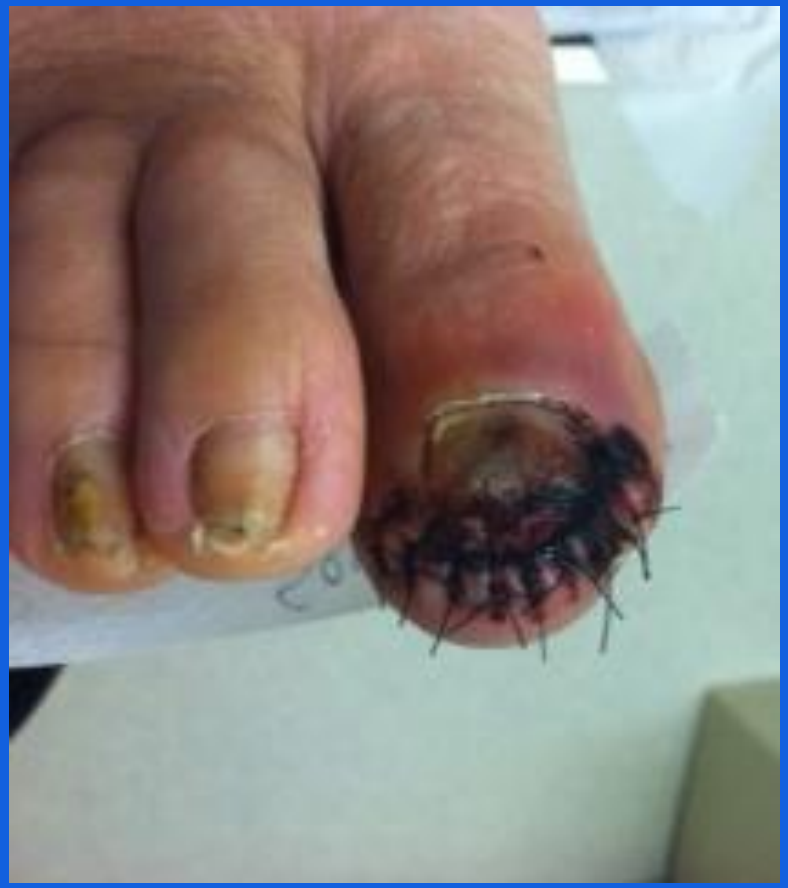
Surgical excision of tip



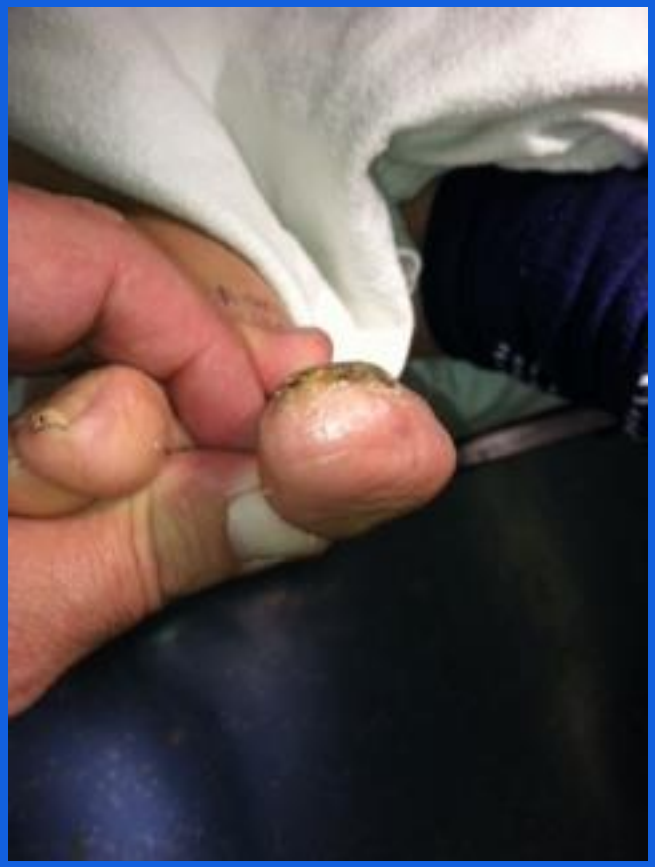


Monitoring circulation
5 Mins – 10 mins – 15 mins

7 days post operative



One month – day of amputation

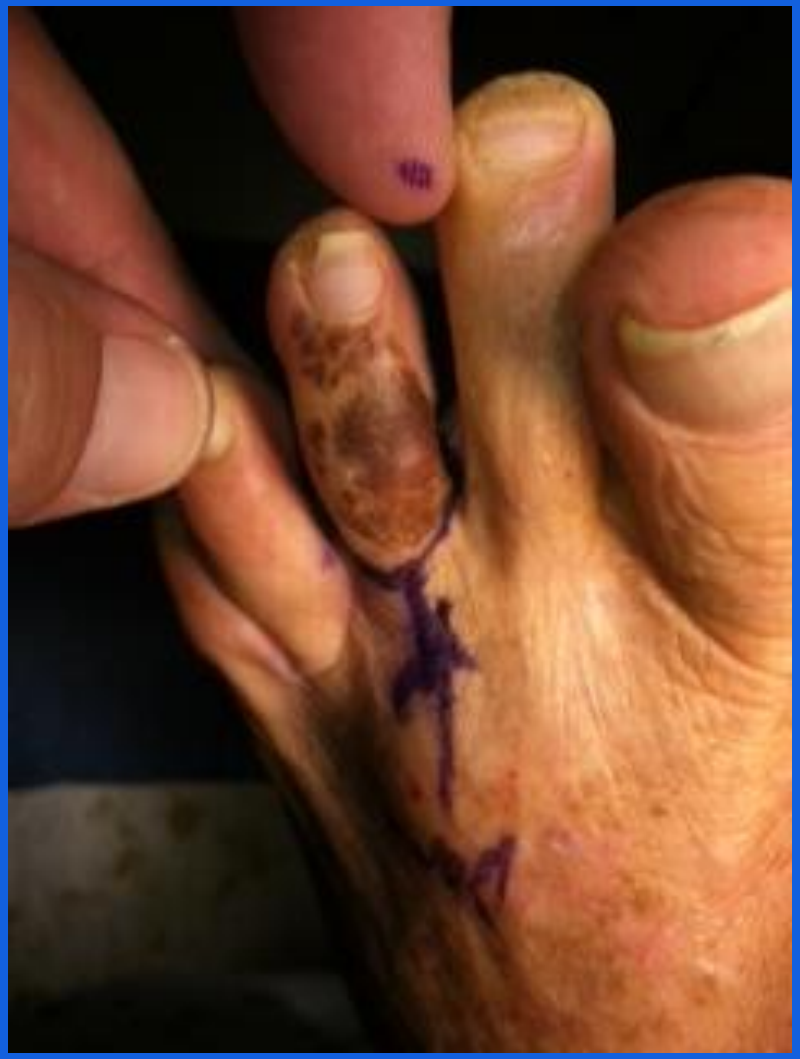


BAD? or GOOD? news for the DPM

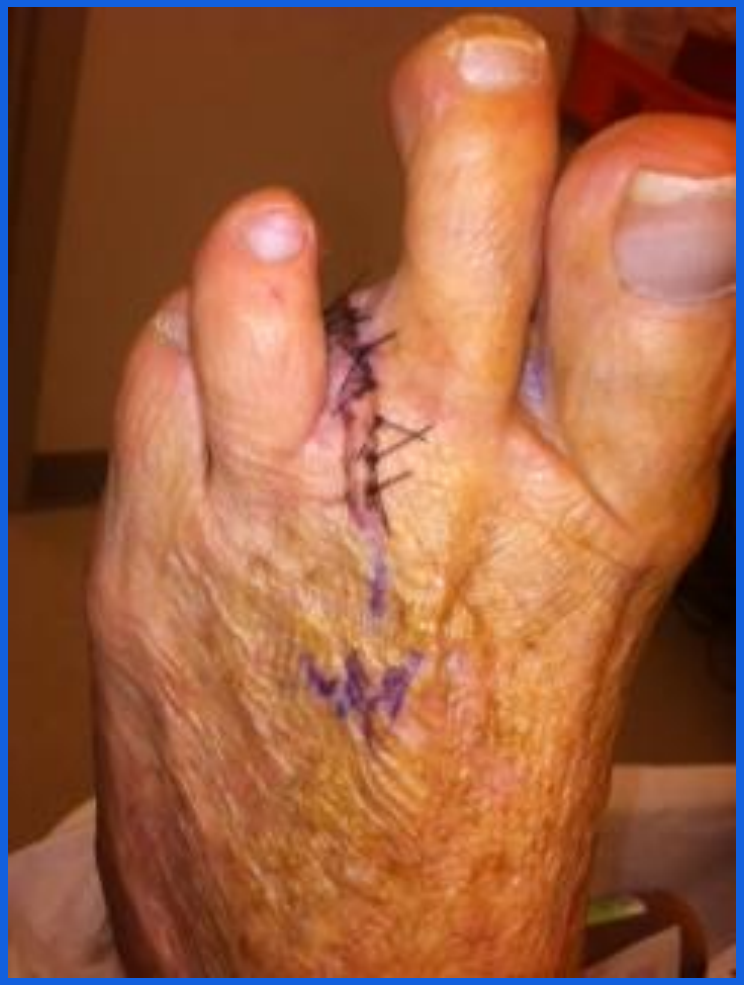
- ***Acral*** melanoma, defined as melanoma involving the *palms,* ***soles and nail units***, has a ***worse*** long term prognosis than melanoma anywhere else on the skin*

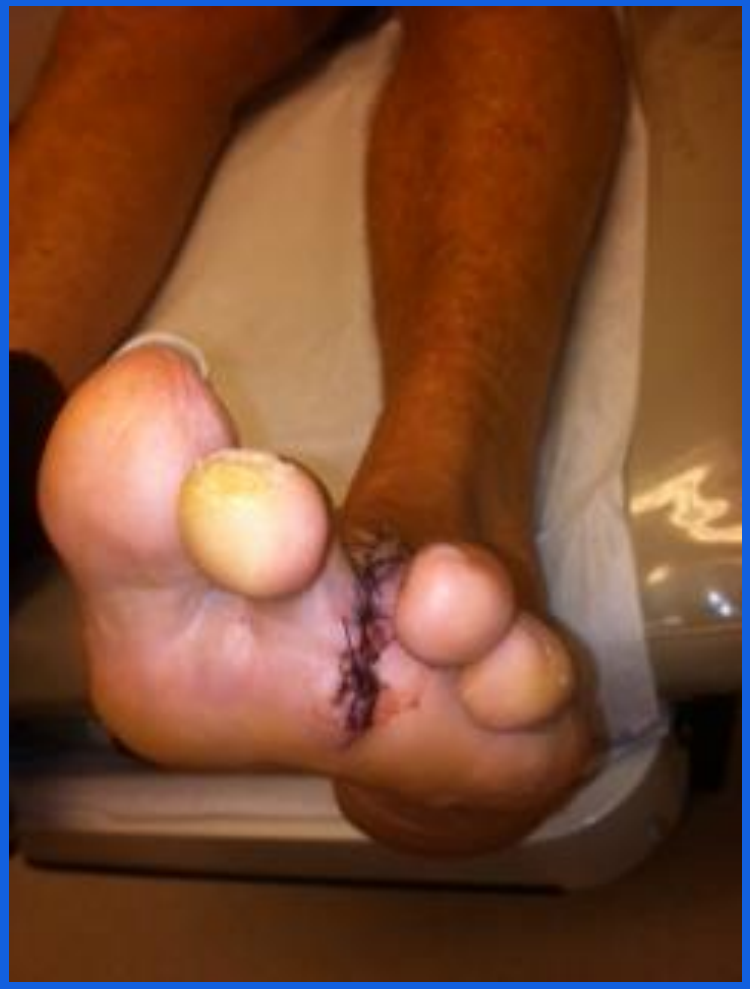
*Bello, DM, Chou JF, Panageas KS, et al. Prognosis of acral melanoma: a series of 281 patients. Ann Surg Oncol. 2013 Oct: 20(11):3618-25

Large Atypical Melanocytic Nevus



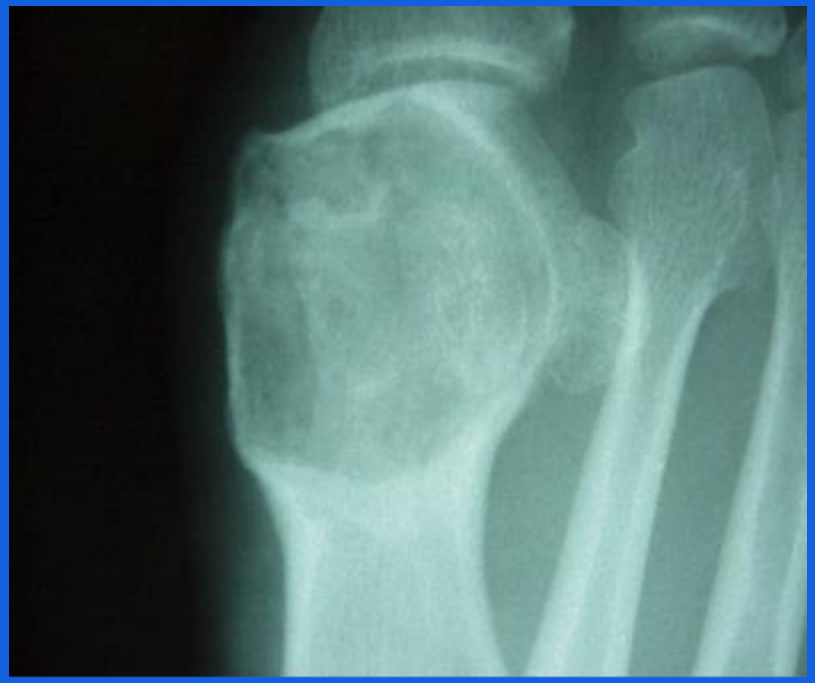
Large Atypical Melanocytic Nevus





Soft Tissue Masses

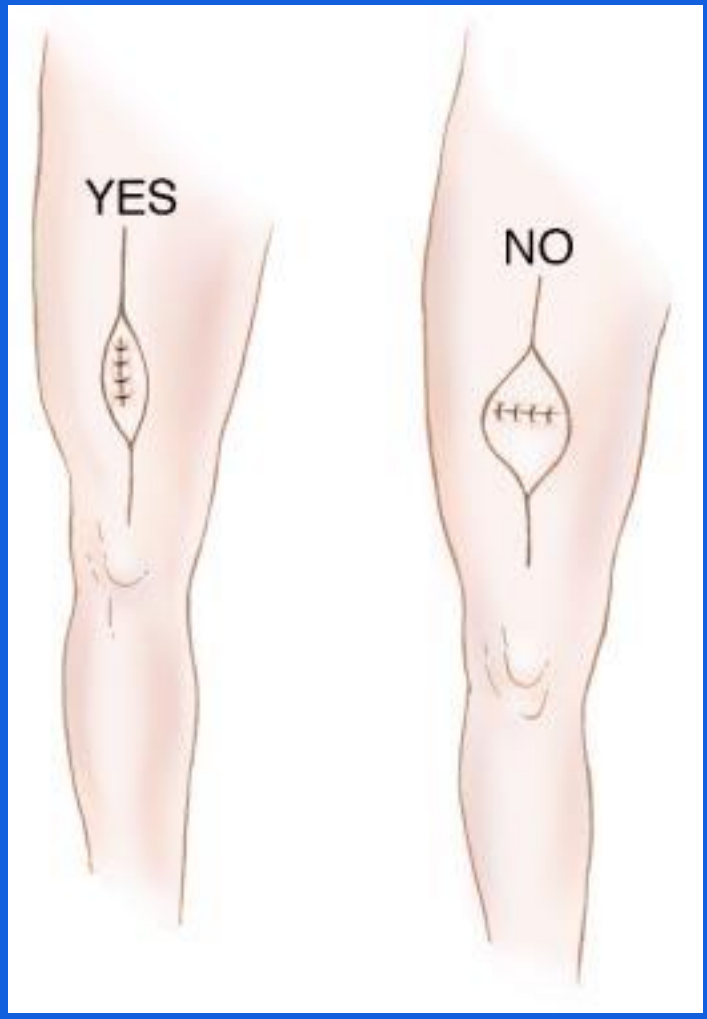
- More difficult to diagnose before biopsy than bone tumors are (bone tumors have characteristic radiographic findings)



Mount Sinai

Incision Placement

- Avoid transverse incisions
- Soft tissue defects in the foot and ankle often require a free flap
- Inappropriately placed incision may lead to amputation



Mount Sinai

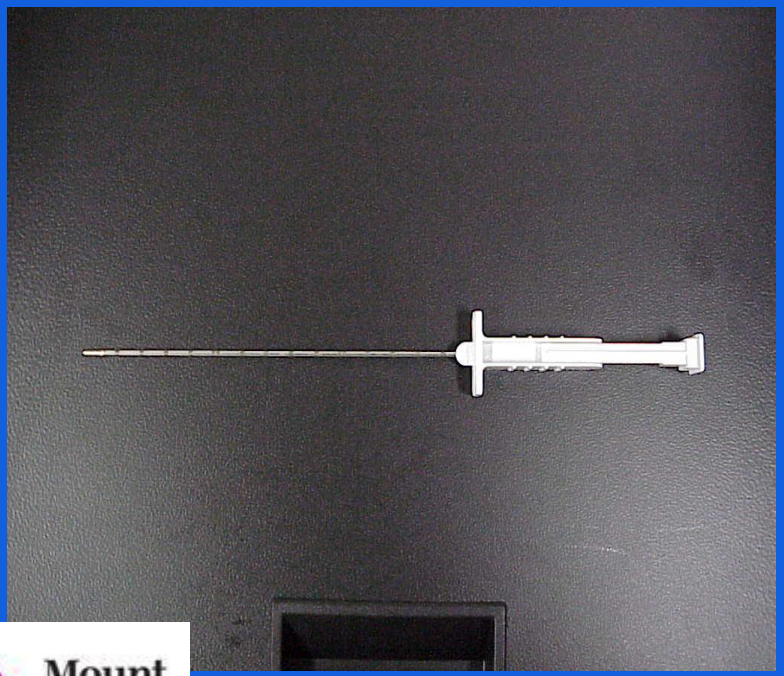
Unplanned Sarcoma Resection

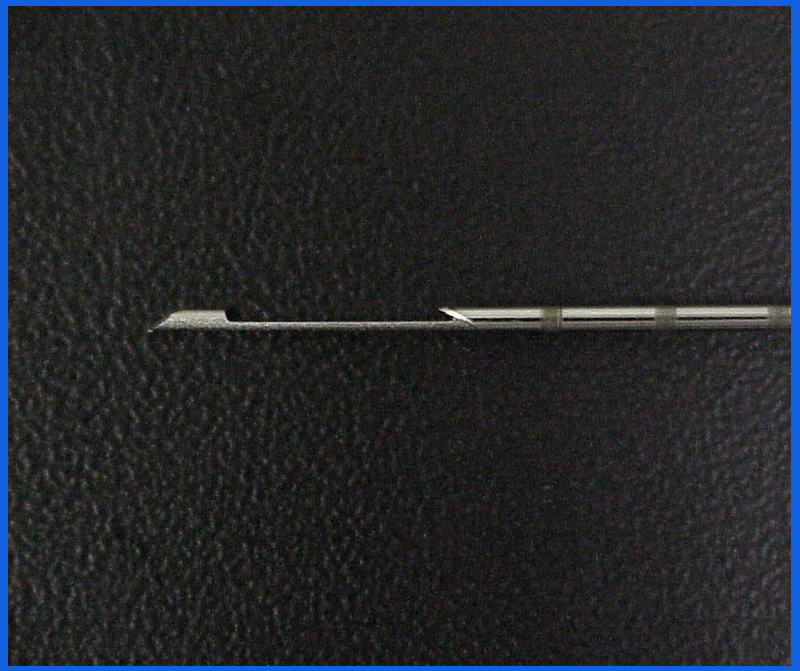
- Resection performed without suspicion of malignancy
  - Often without prior imaging
- 50% have microscopic residual disease when no residual tumor is seen on imaging
  - Wait for postoperative inflammation to resolve before imaging or re-operating
    - 4-6 weeks

Mount Sinai

Biopsy

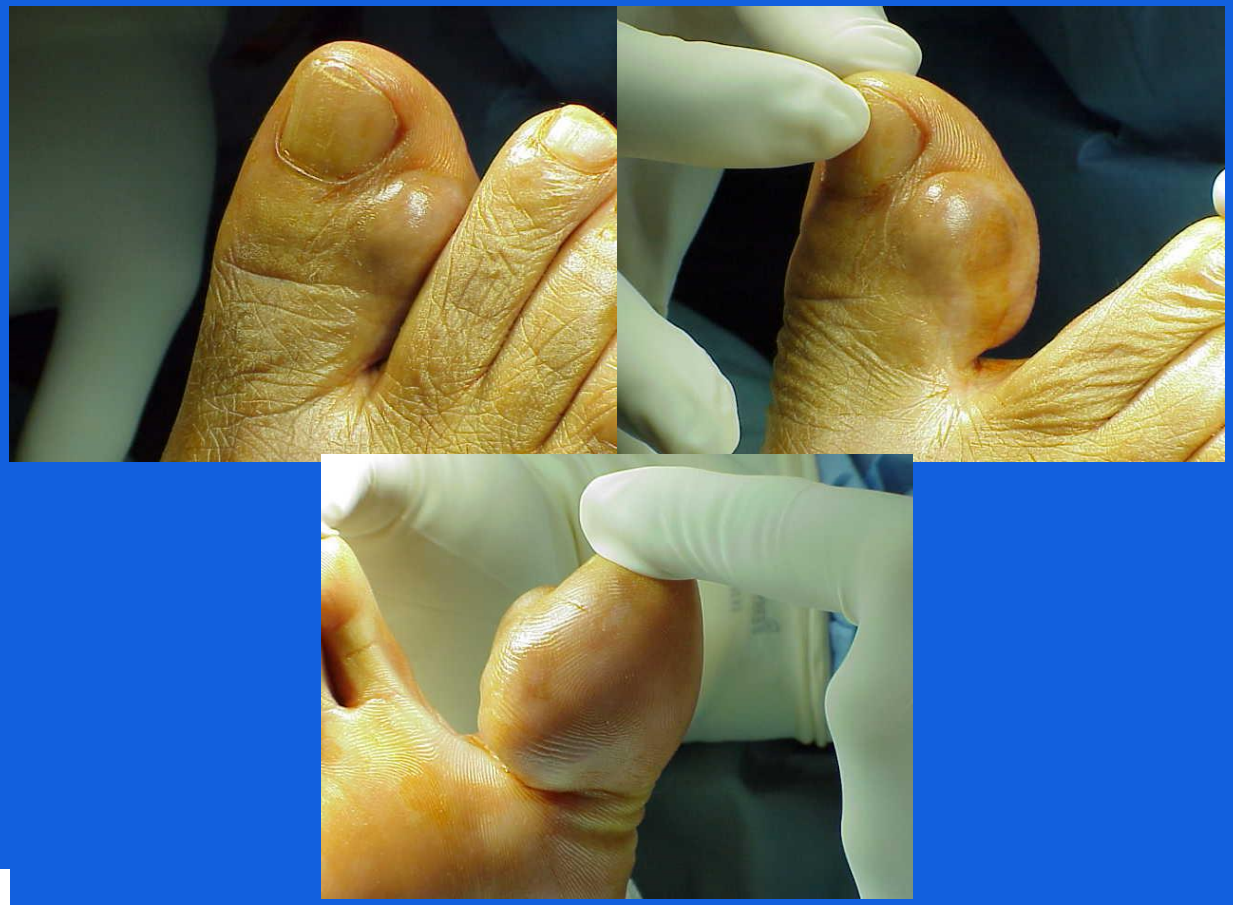
- Cutting needles, i.e., Tru-Cut needle obtains small amount of tissue usually adequate for pathologic analysis - causes minimal trauma





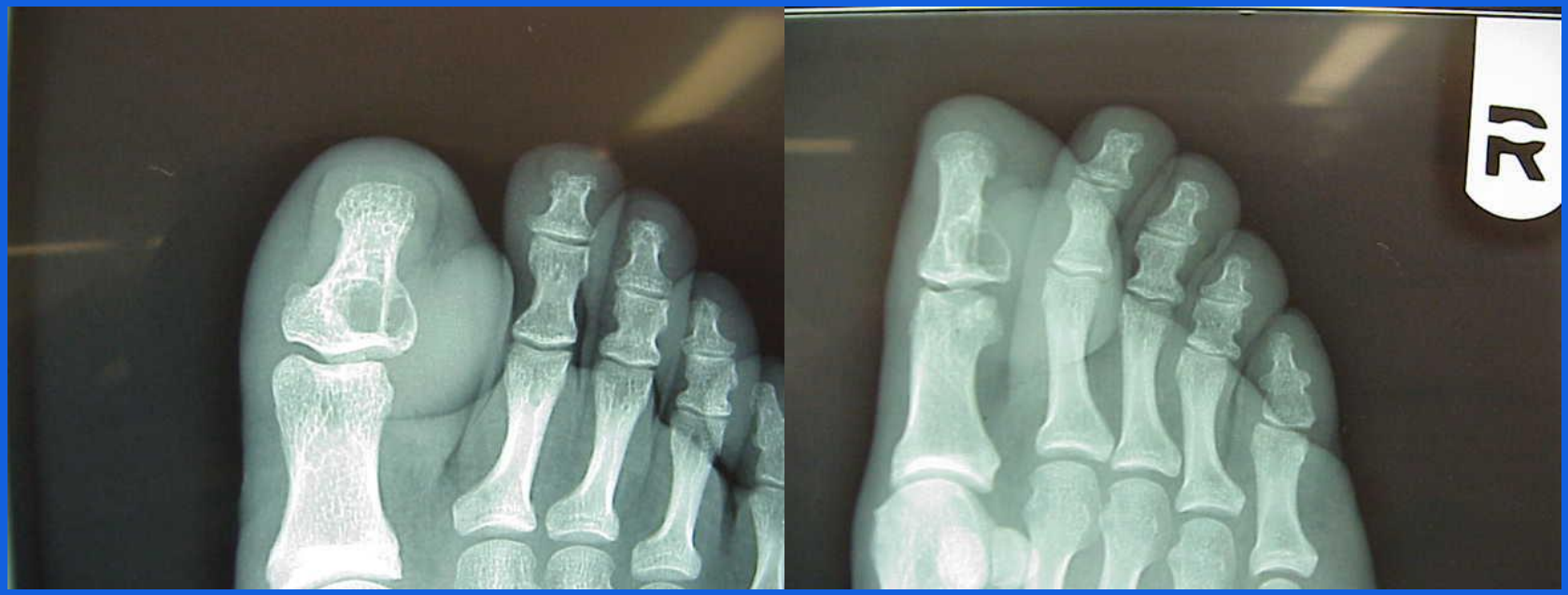
Mount Sinai

Soft Tissue Mass of Hallux



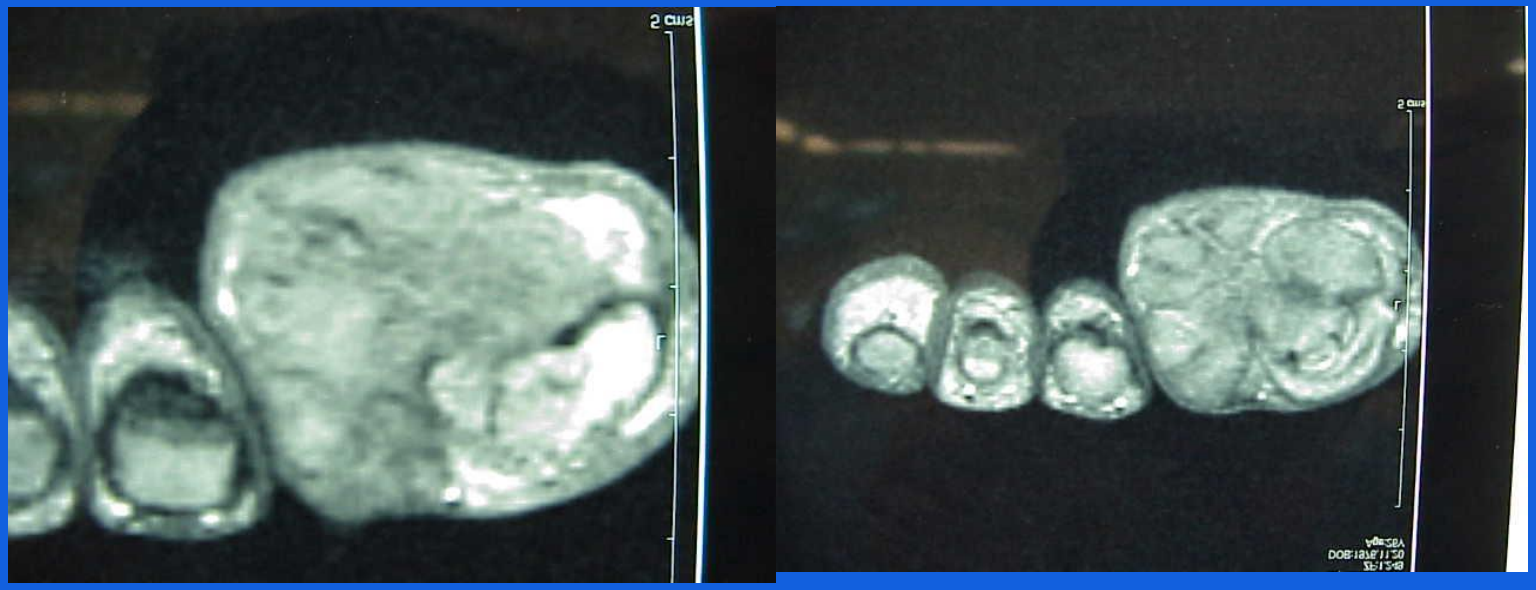
Mount Sinai

Plain Radiographs



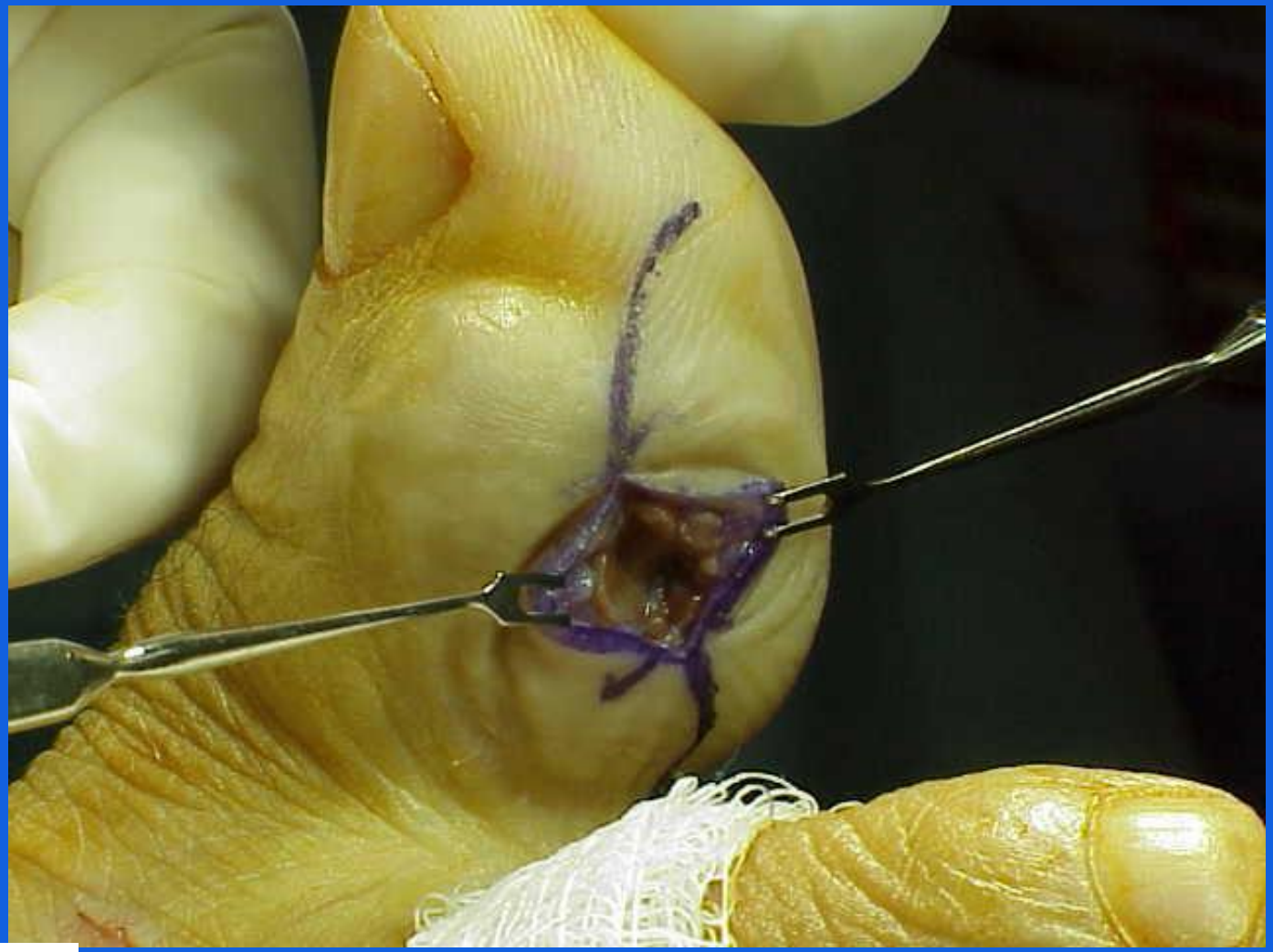
Mount Sinai

MRI



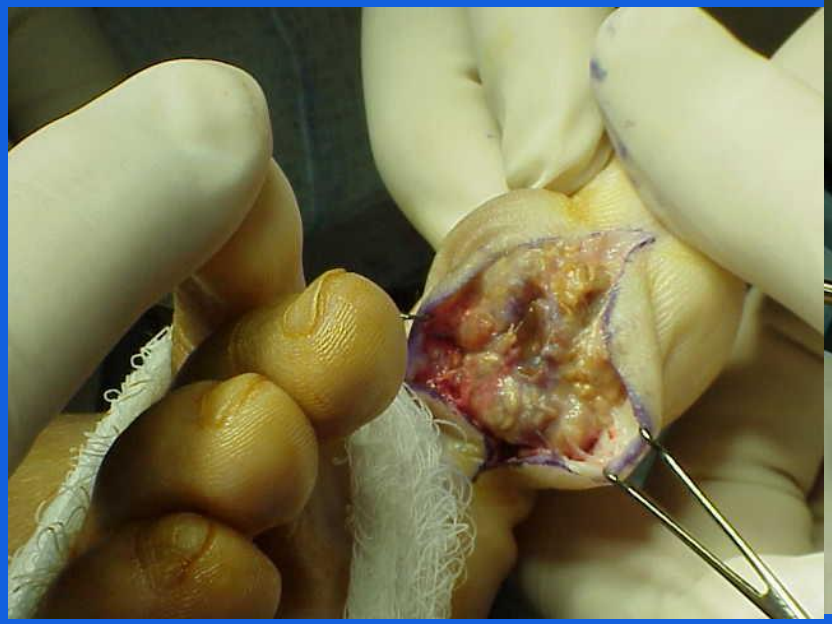
Mount Sinai

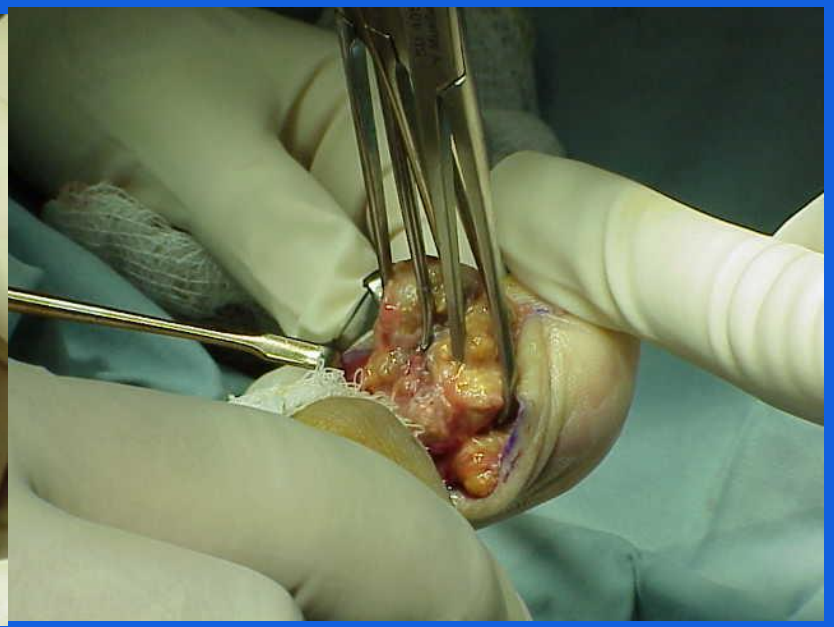
Frozen Section



Mount Sinai

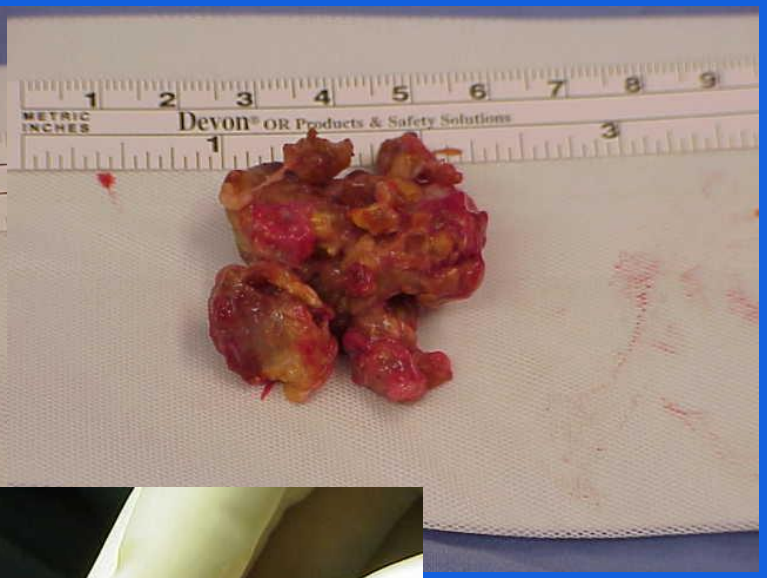
Dissection

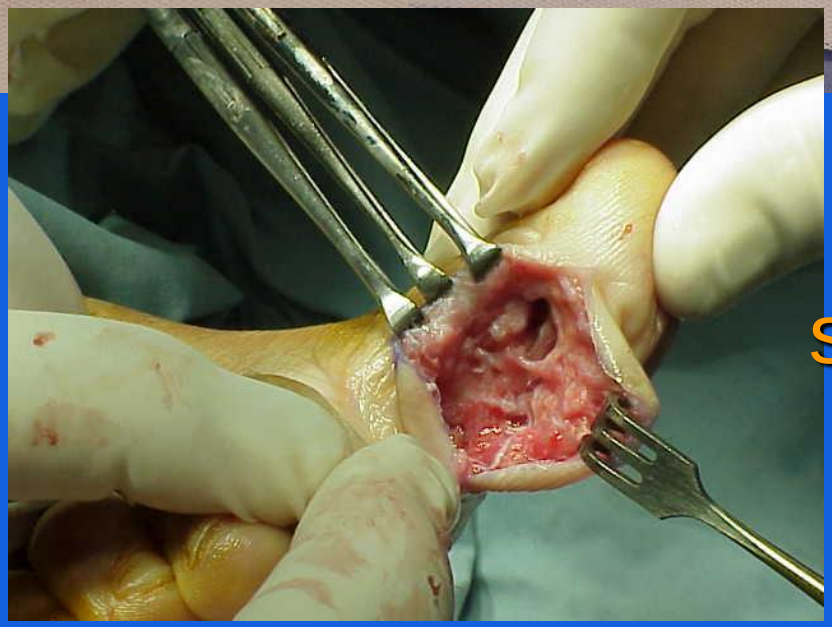




Mount Sinai

Excised Giant Cell Tumor

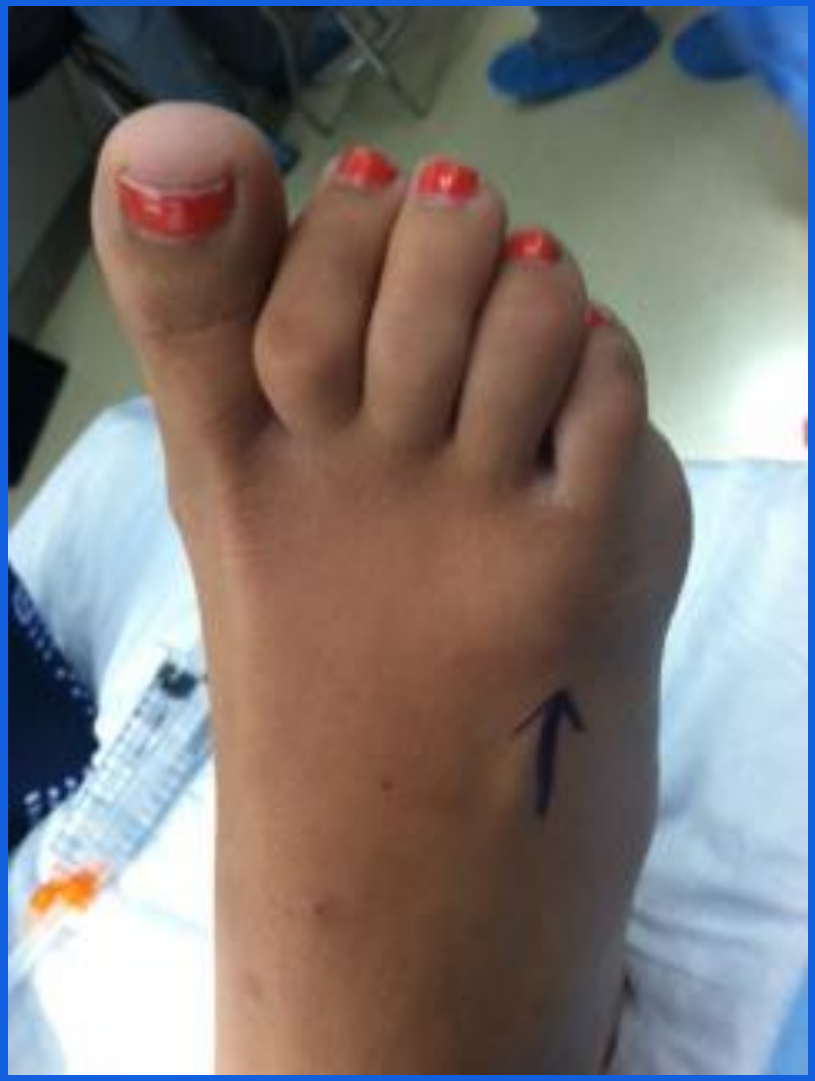




Orient specimen for pathologist!

Mount Sinai

Soft Tissue Mass



2012 1:56 PM
nson, DPM

GY Status: Final result MyChart: Not Released

Value

COLLECTION DATE: 06/07/2012

SPECIMEN SOURCE: A. CYST (RT. FOOT)

CLINICAL HISTORY:Soft tissue mass right foot - attempted aspiration resulted in dry tap, formalin drawn into syringe and injected back into specimen bottle. Please spin down for cells

GENERAL CATEGORIZATION:
Other

GROSS DESCRIPTION: 12cc of clear fluid received. Specimen wa
concentrated for selective cellular enhancement by using a liquid
based slide preparation technique. One thin prep was prepared.
Total: 1tp

The electronic signature(s) indicates that the named Attending
Pathologist has evaluated the specimen referred to in the signed
section of the report and formulated the diagnosis therein.

Initial Evaluation performed by
JOLENE OCTAVIUS CT(ASCP)
Electronically signed 6/11/2012 10:43:40AM Final Diagnosis

GENERAL CATEGORIZATION:
Other

DIAGNOSIS / INTERPRETATION:

Suboptimal specimen:

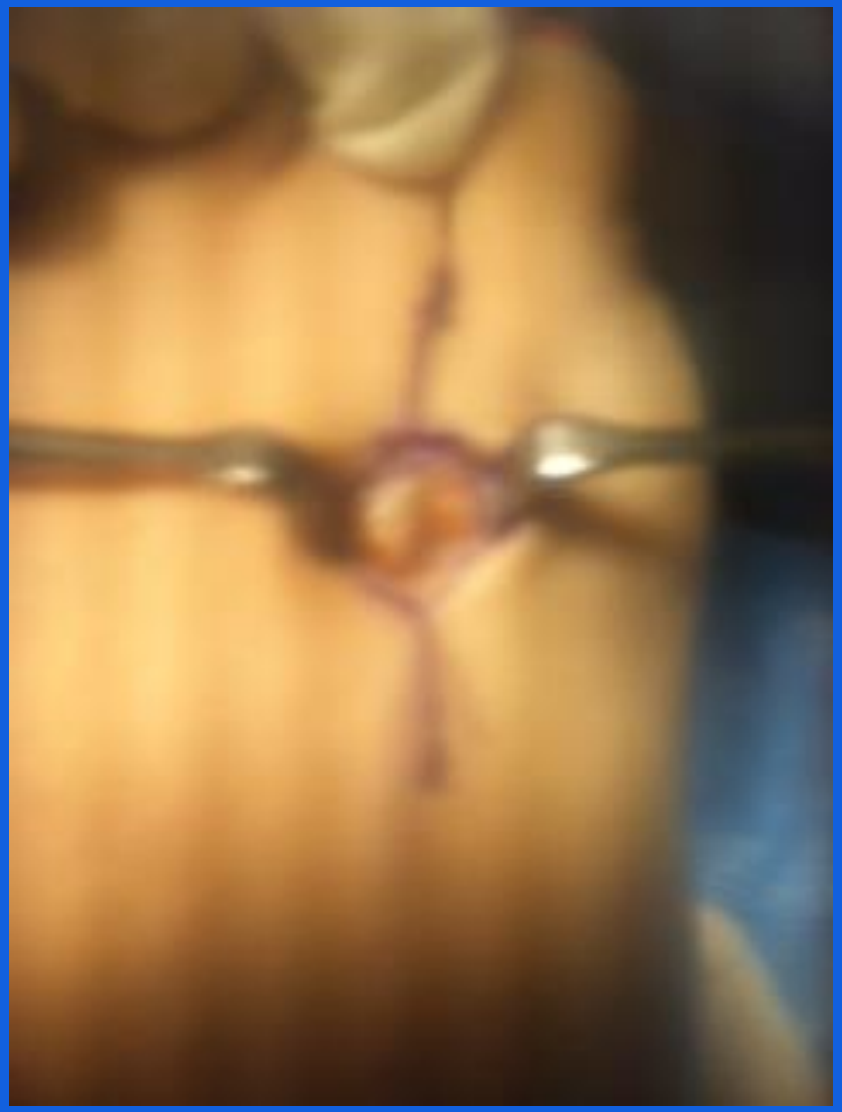
(formalin-fixed cellular material).

Scattered multinucleated giant cells in a background of single spindle to polygonal cells.

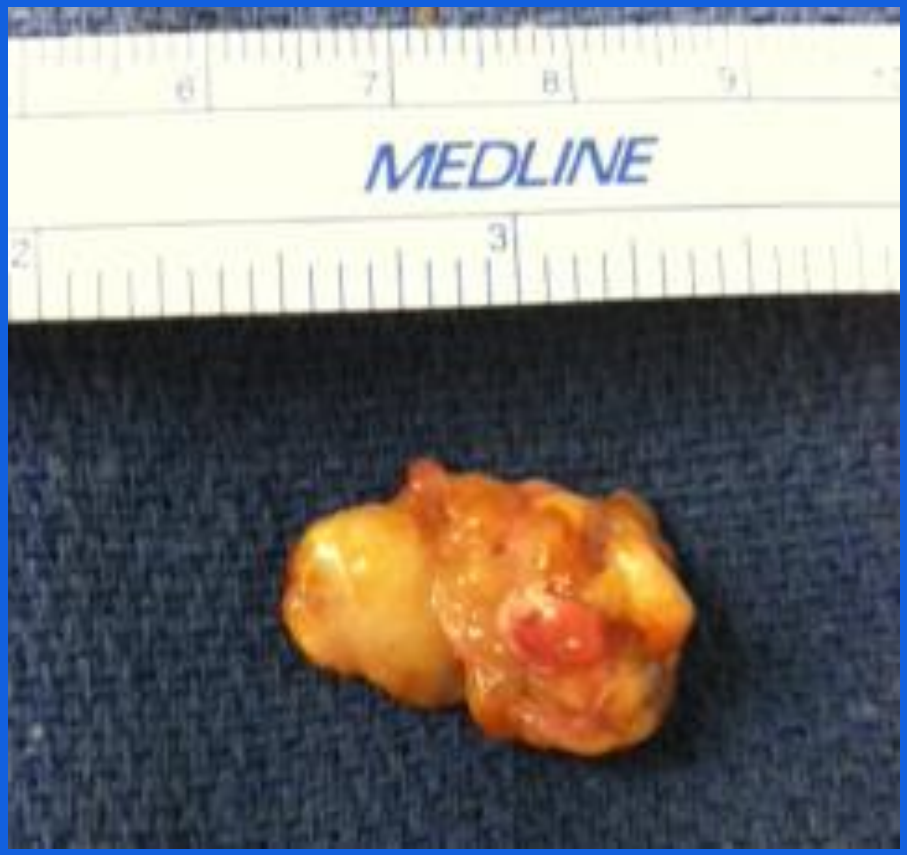
Findings are most suggestive of giant cell tumor of tendon sheath.

RECOMMENDATIONS:
Recommend further investigation, if clinically indicated.

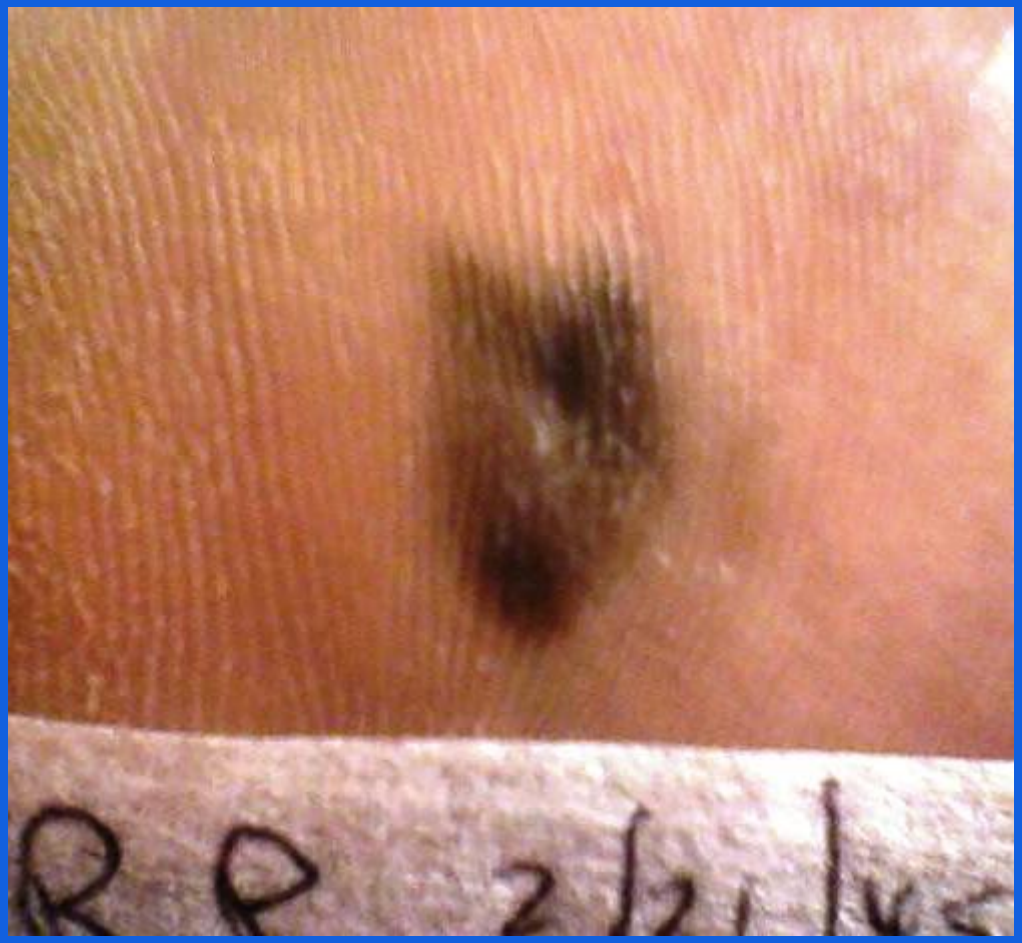
Frozen section



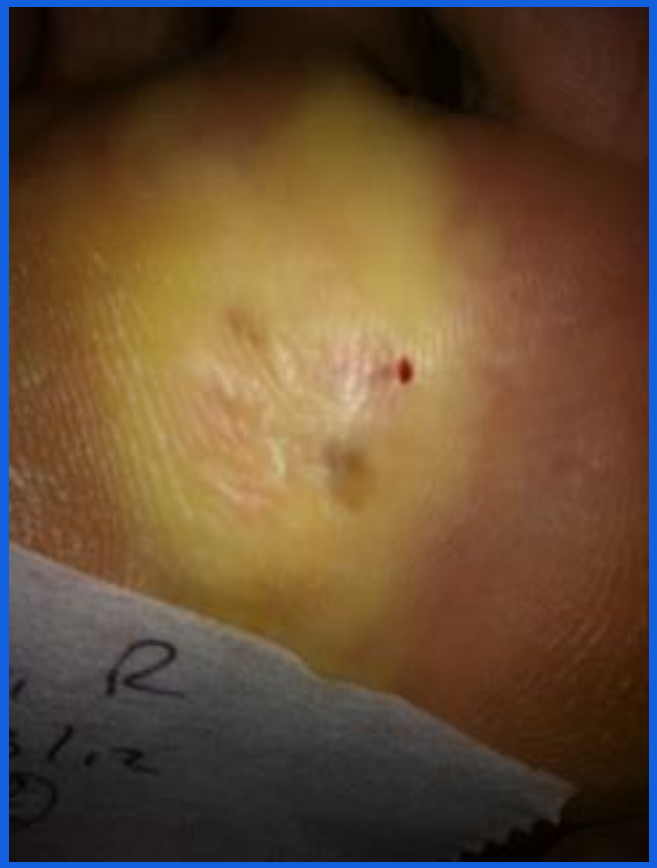
Lesion excised



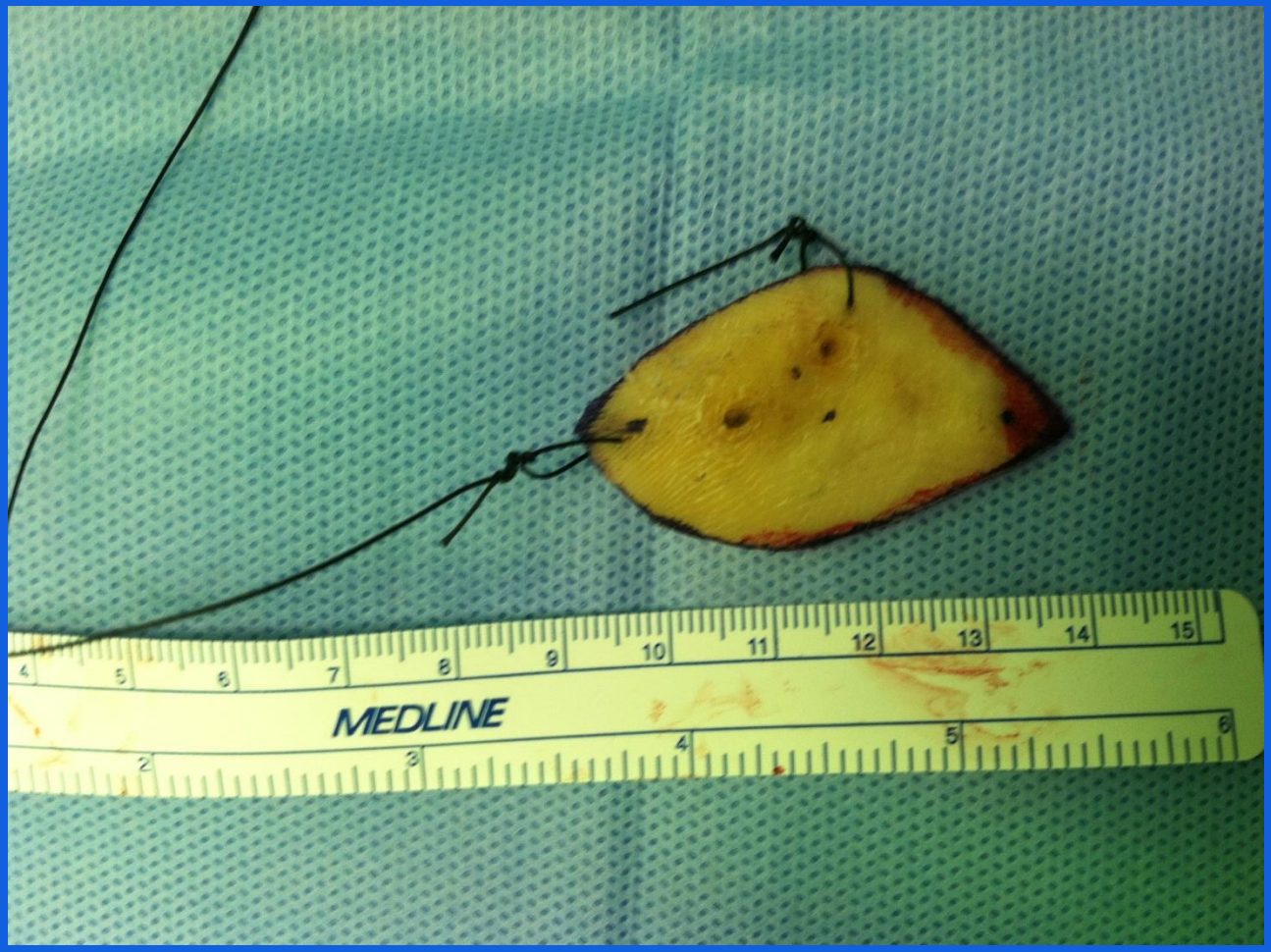
In Situ Melanoma



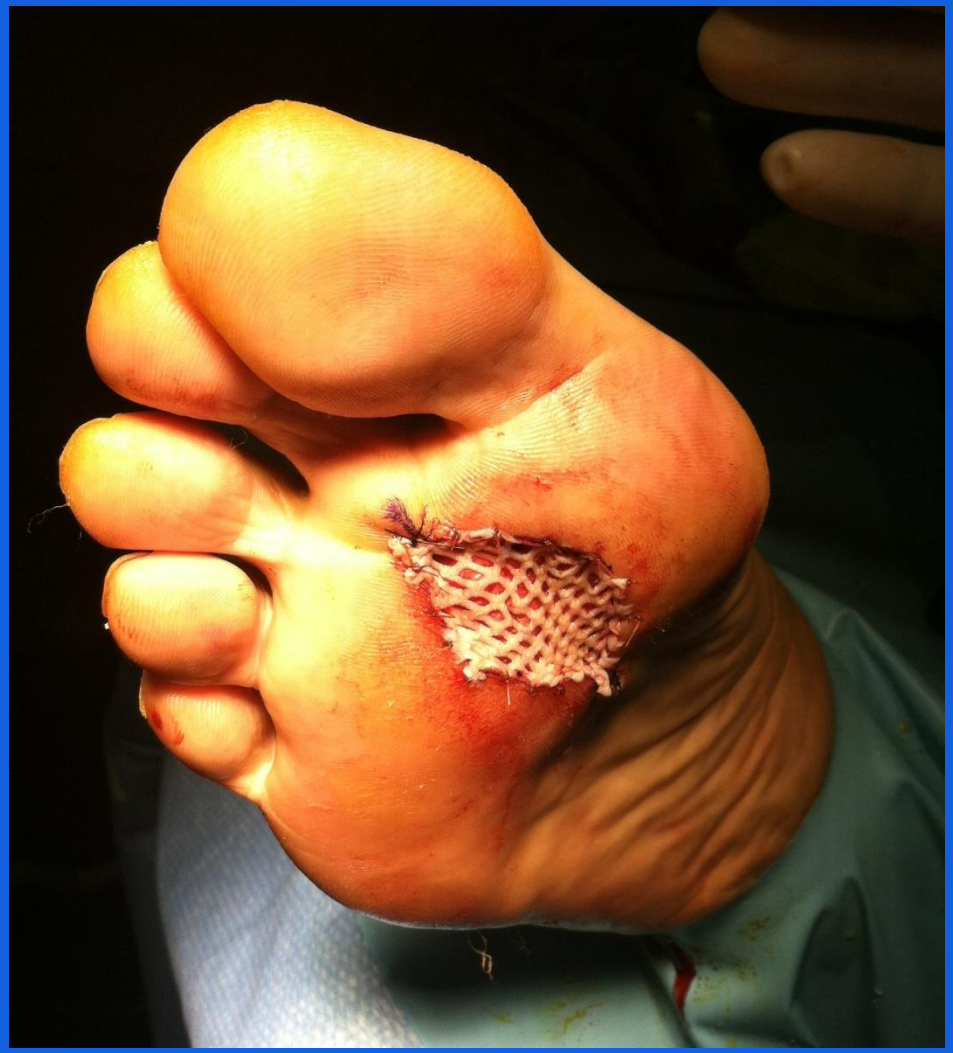
Recurrence in Margin



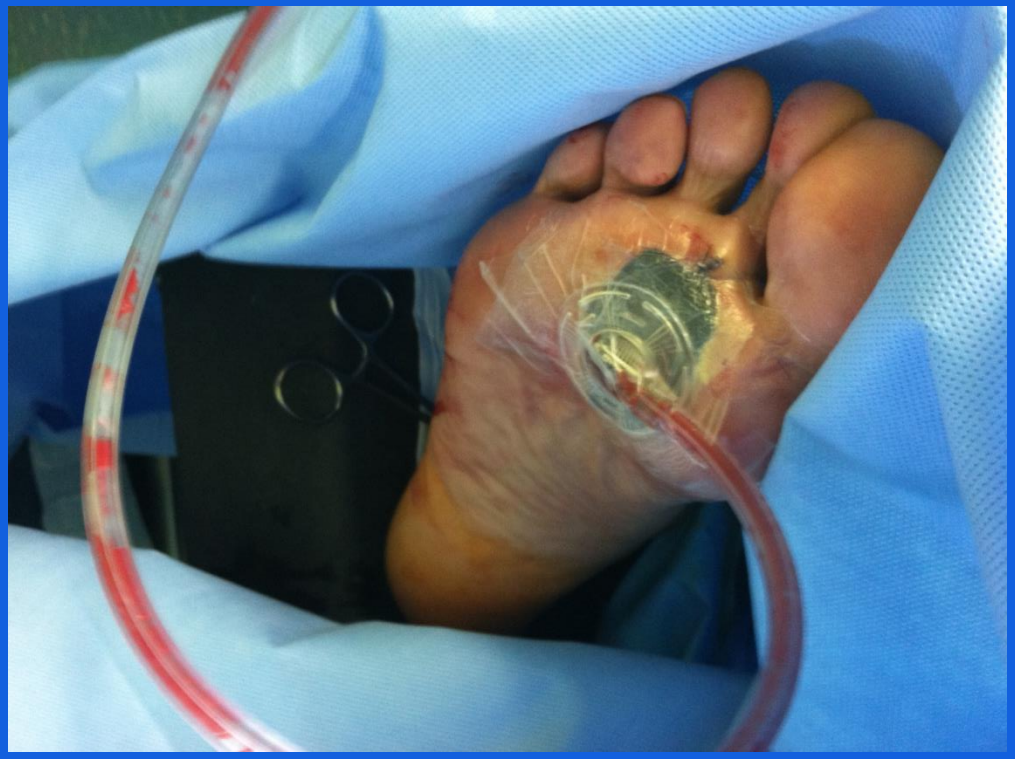
WLE



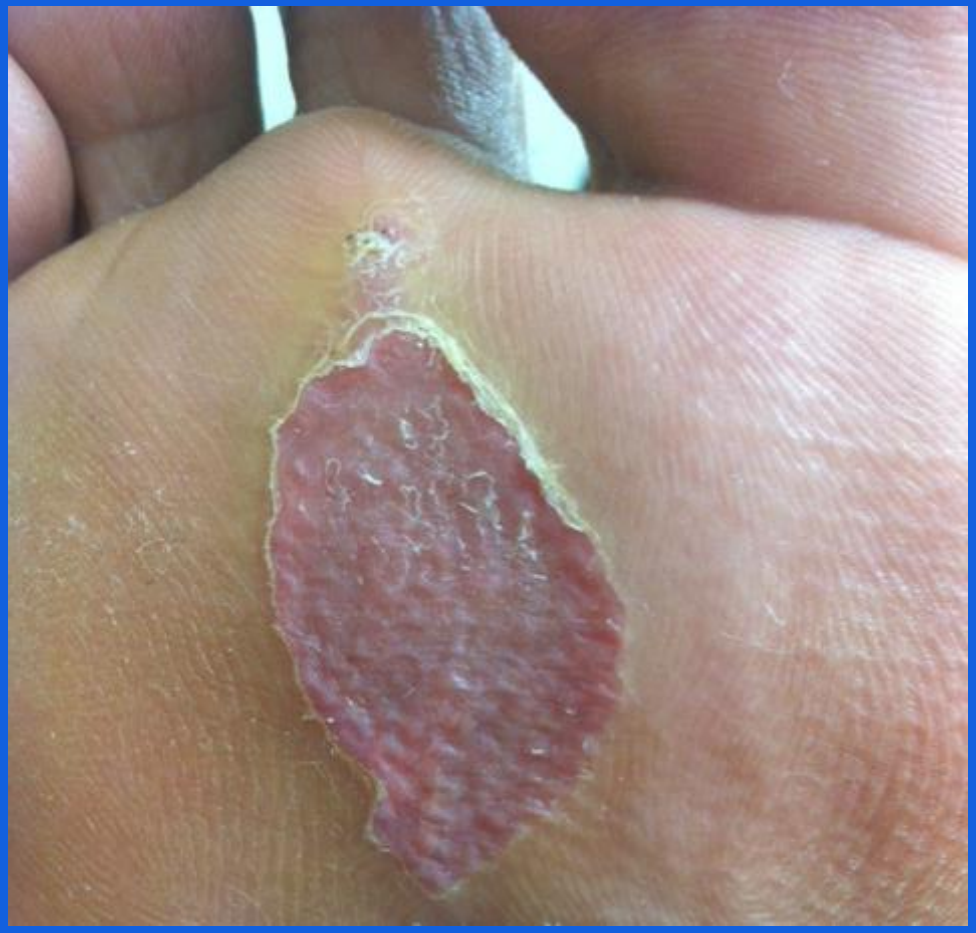
Skin Graft



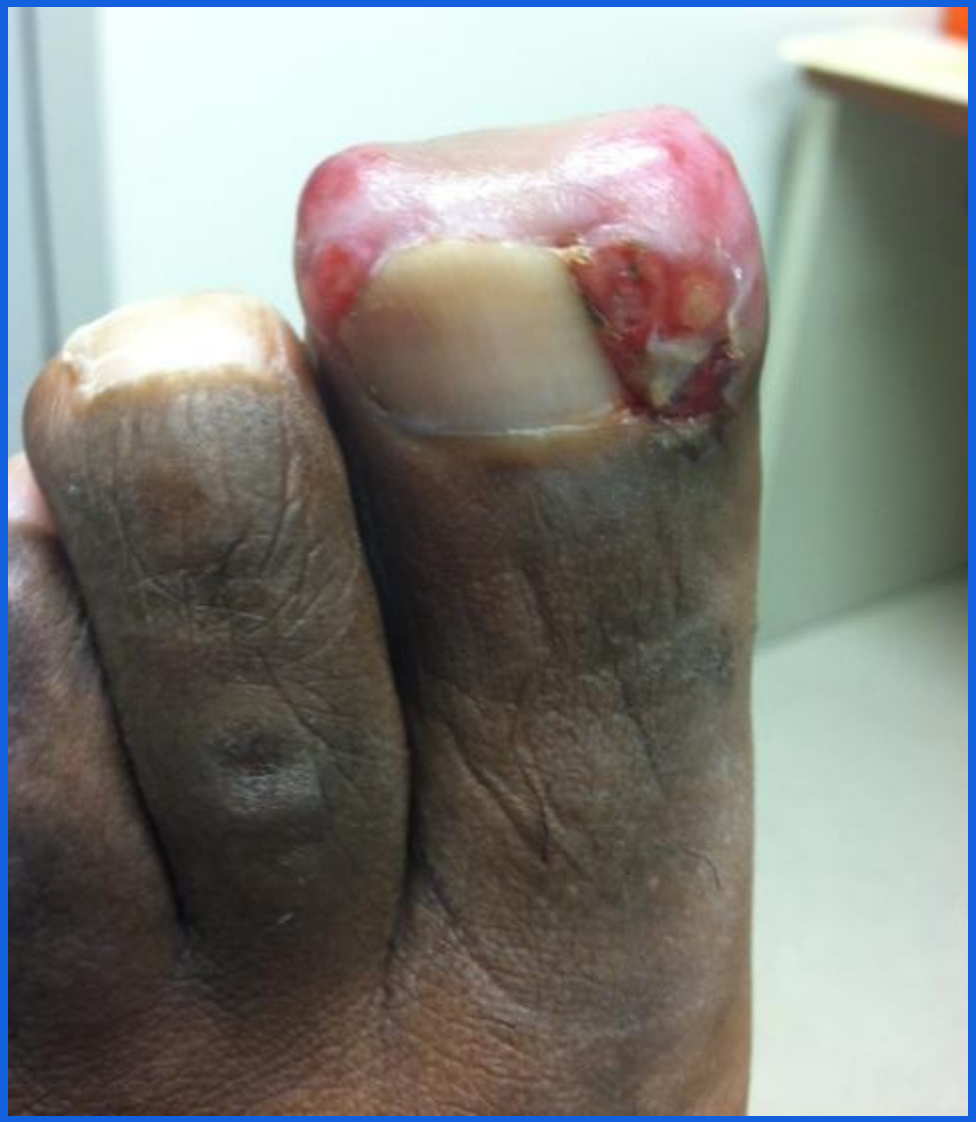
VAC DRESSING



6 Months

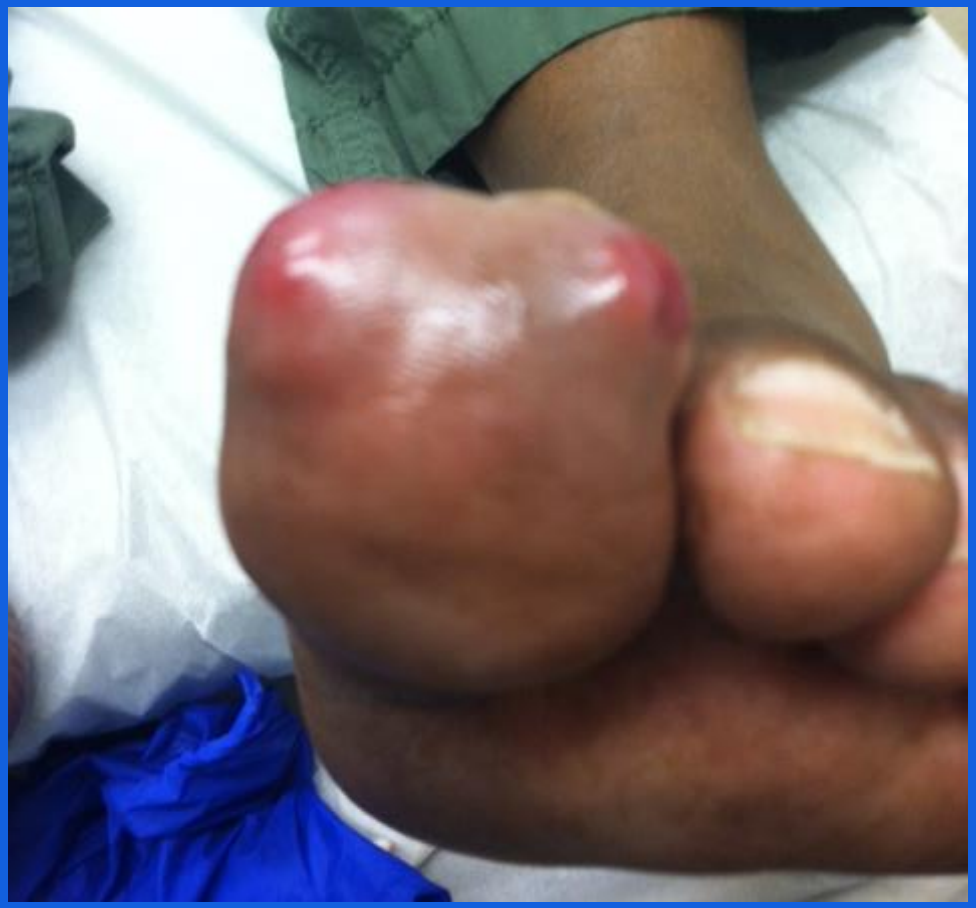


Severe infected nail folds

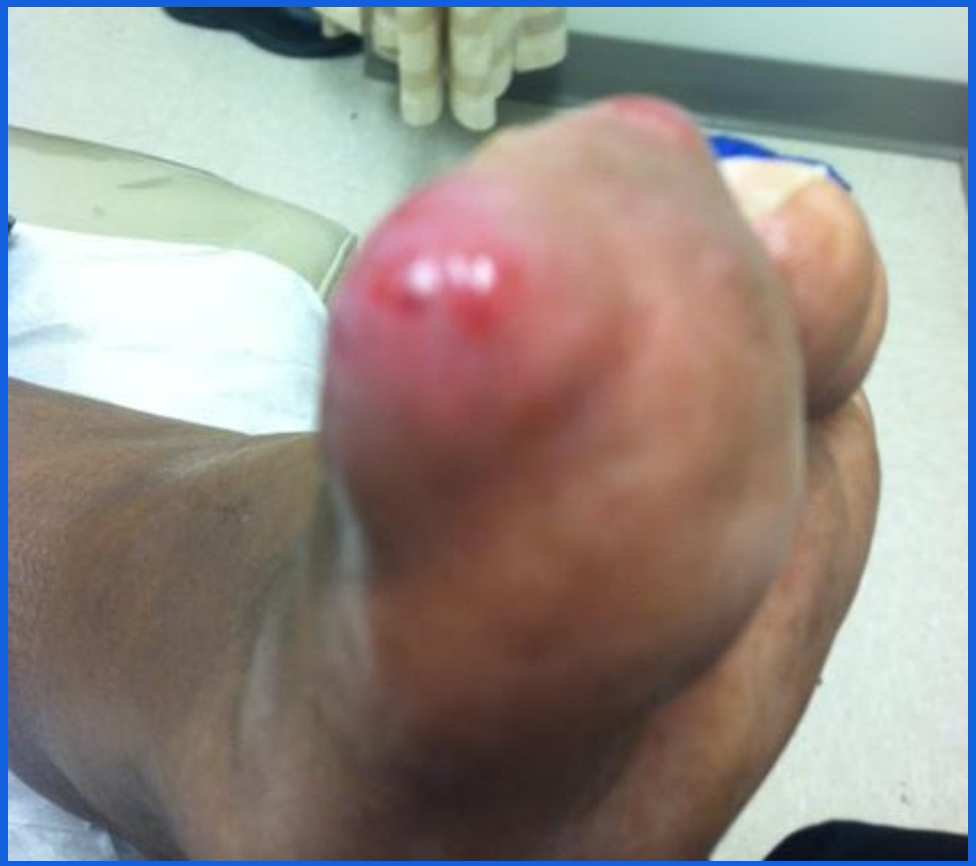


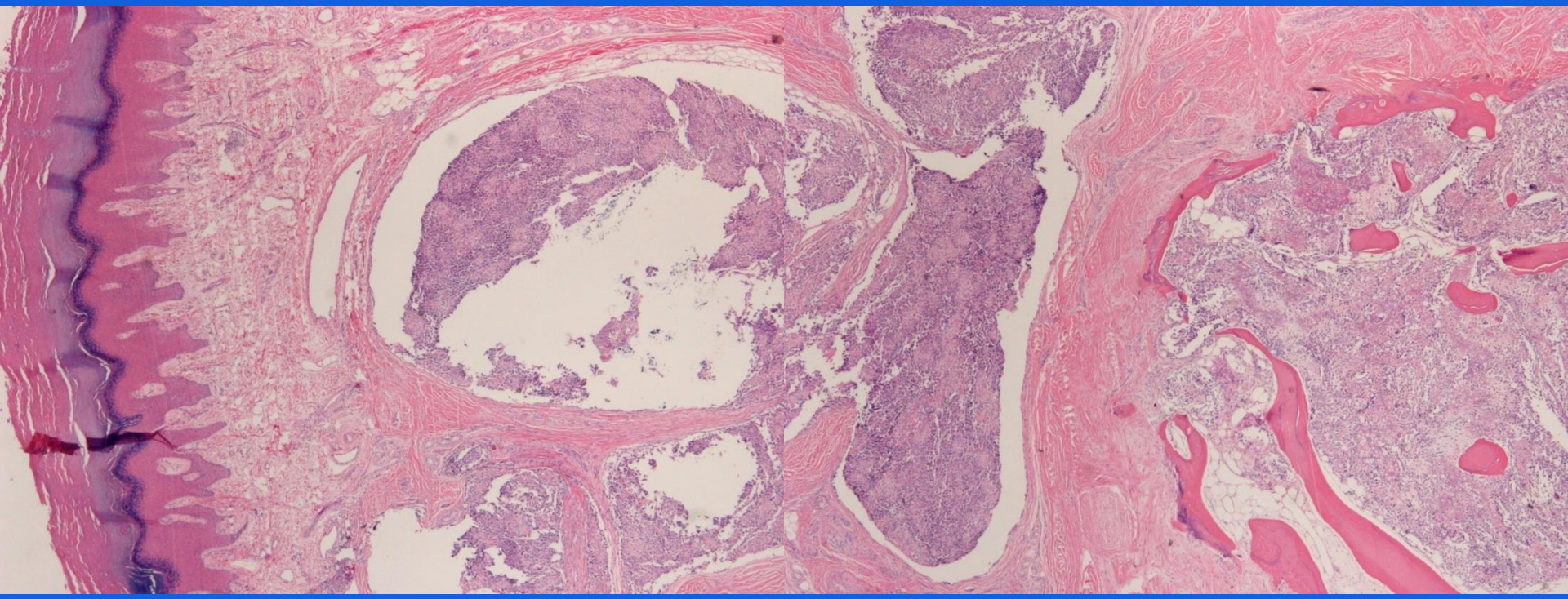
Severe infected nail folds

Severe infected nail folds

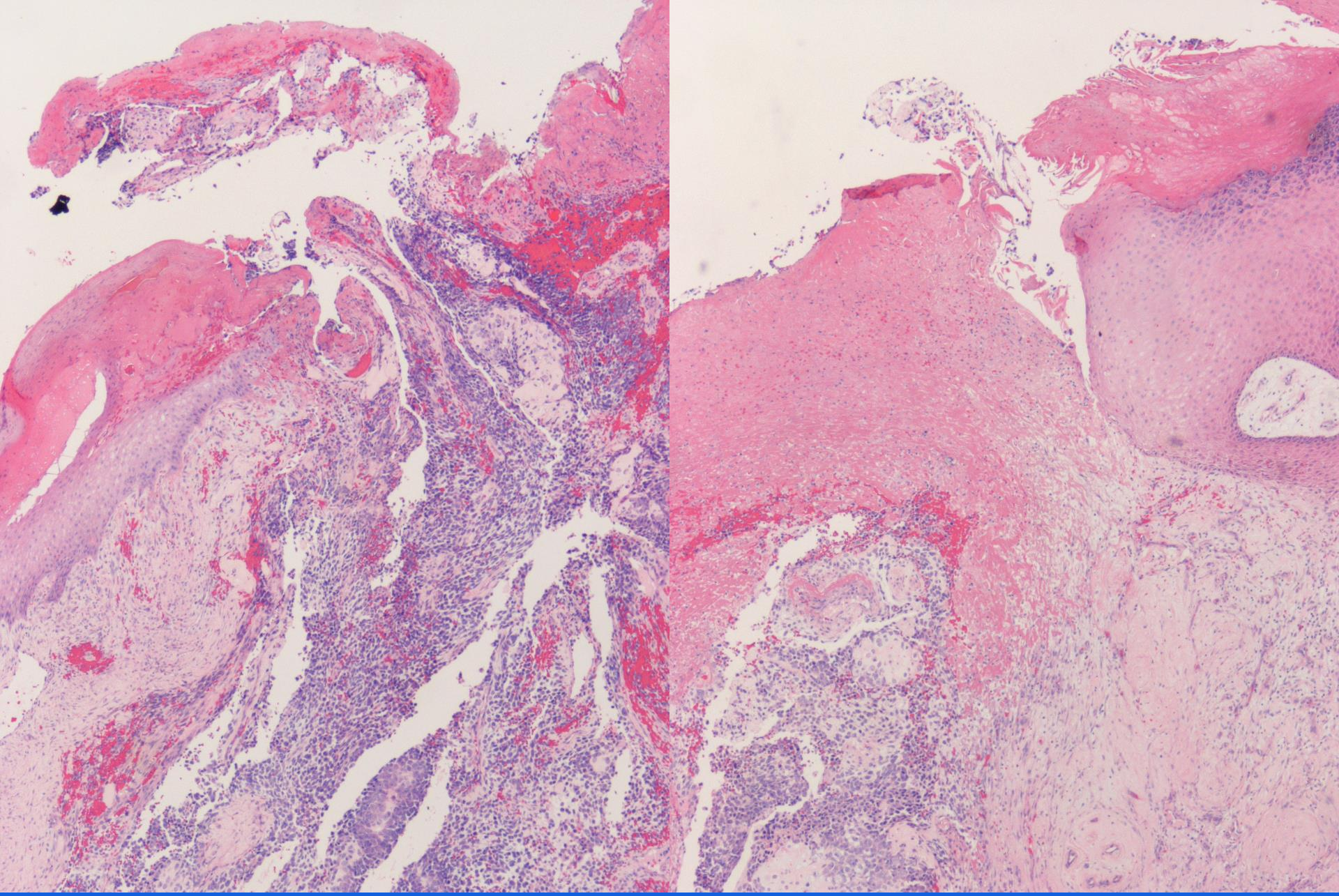


Severe infected nail folds

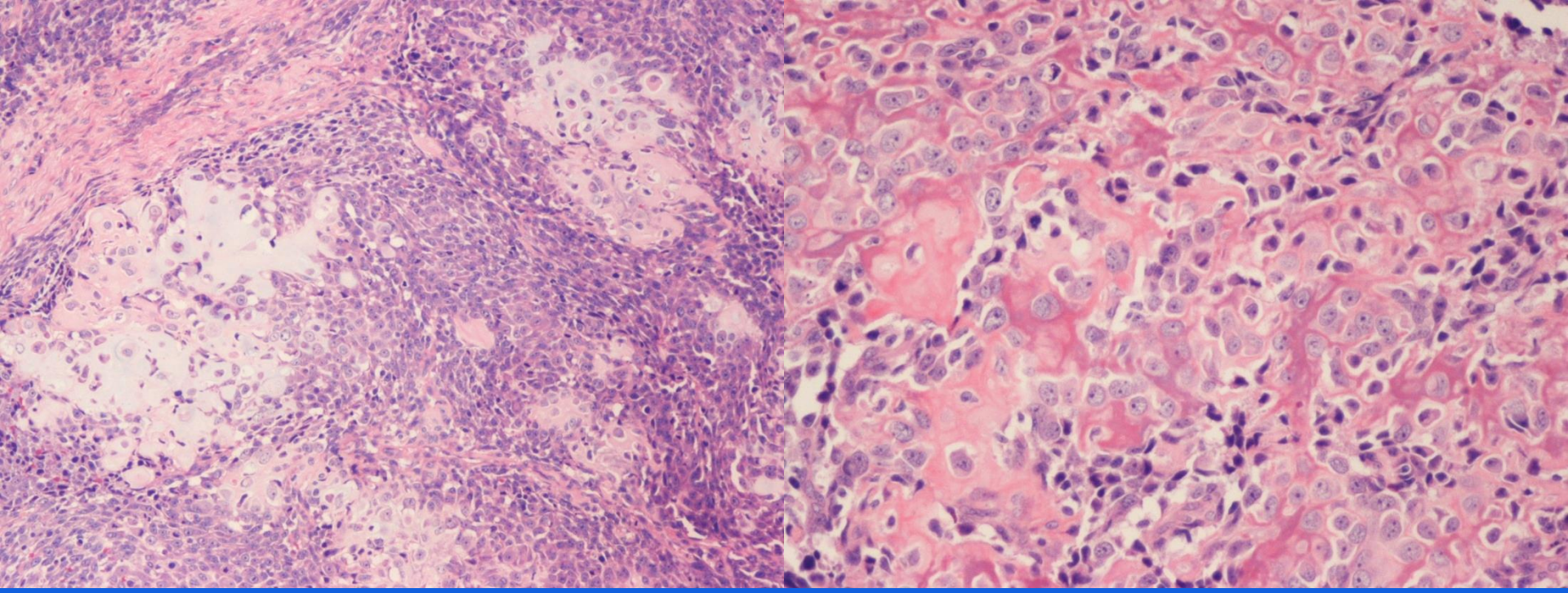




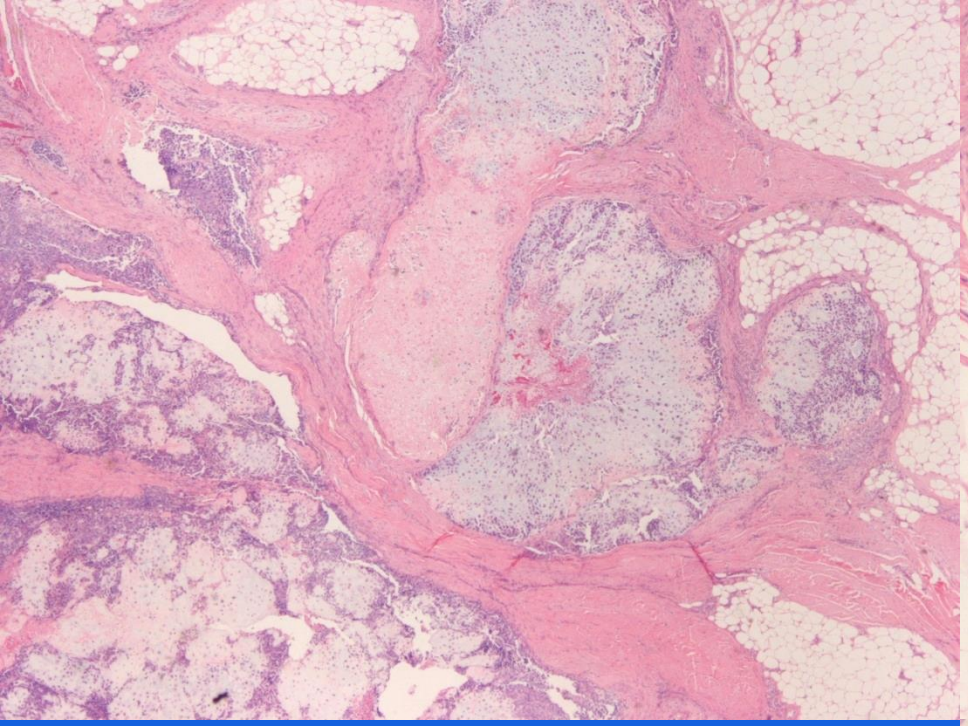
Tumor in bone and soft tissue under the skin.

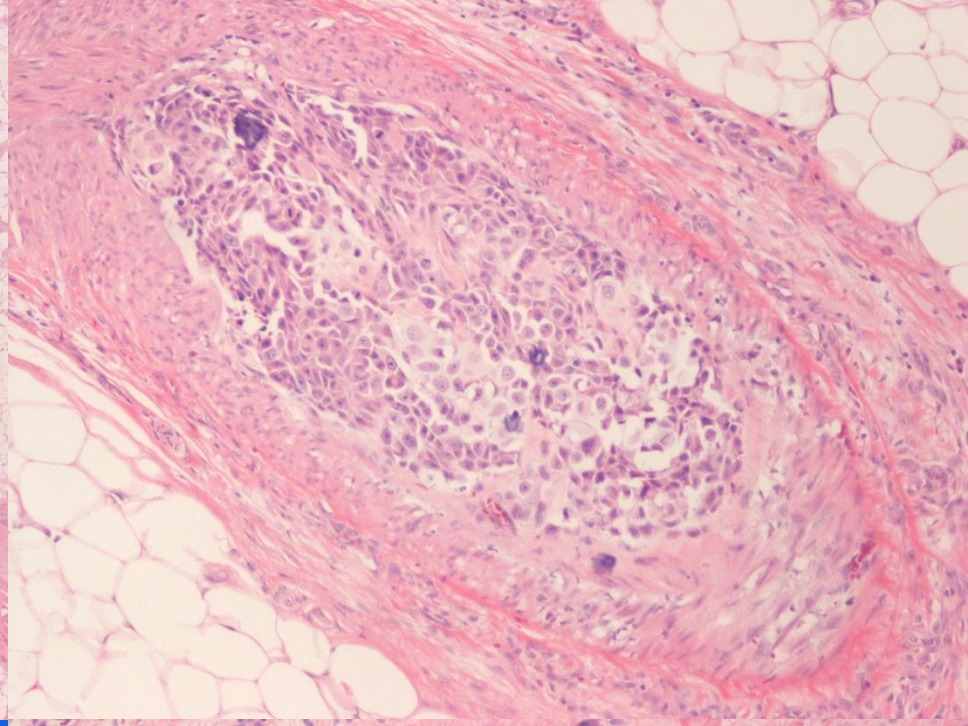


Tumor under areas of skin ulceration.



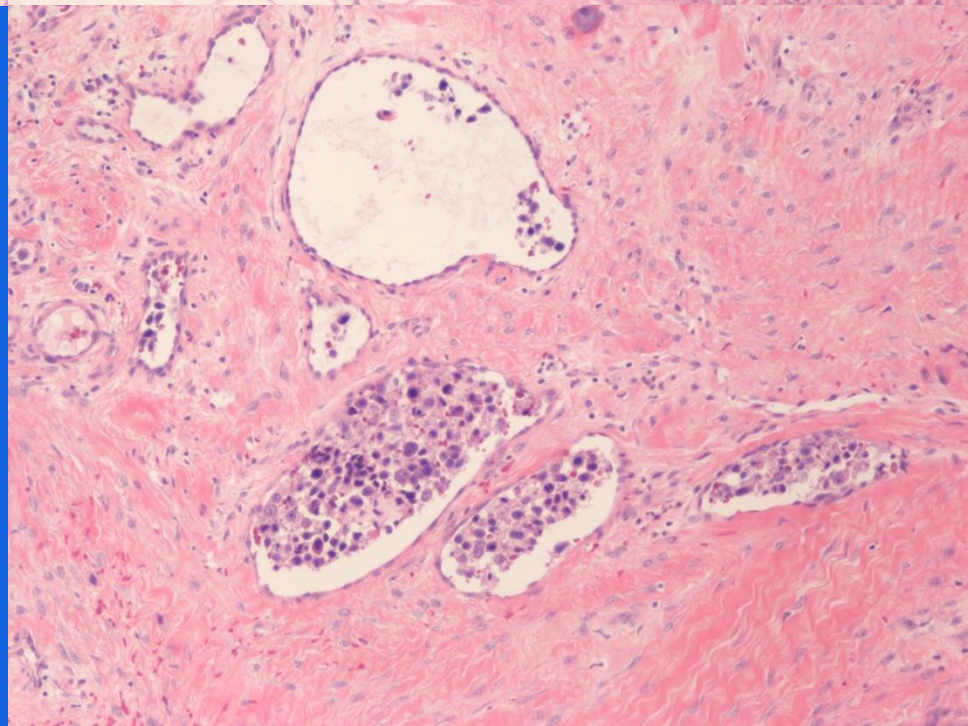
Hypercellular areas with cartilaginous matrix (left) and high power view with tumor cells producing osteoid in a lace-like fashion.



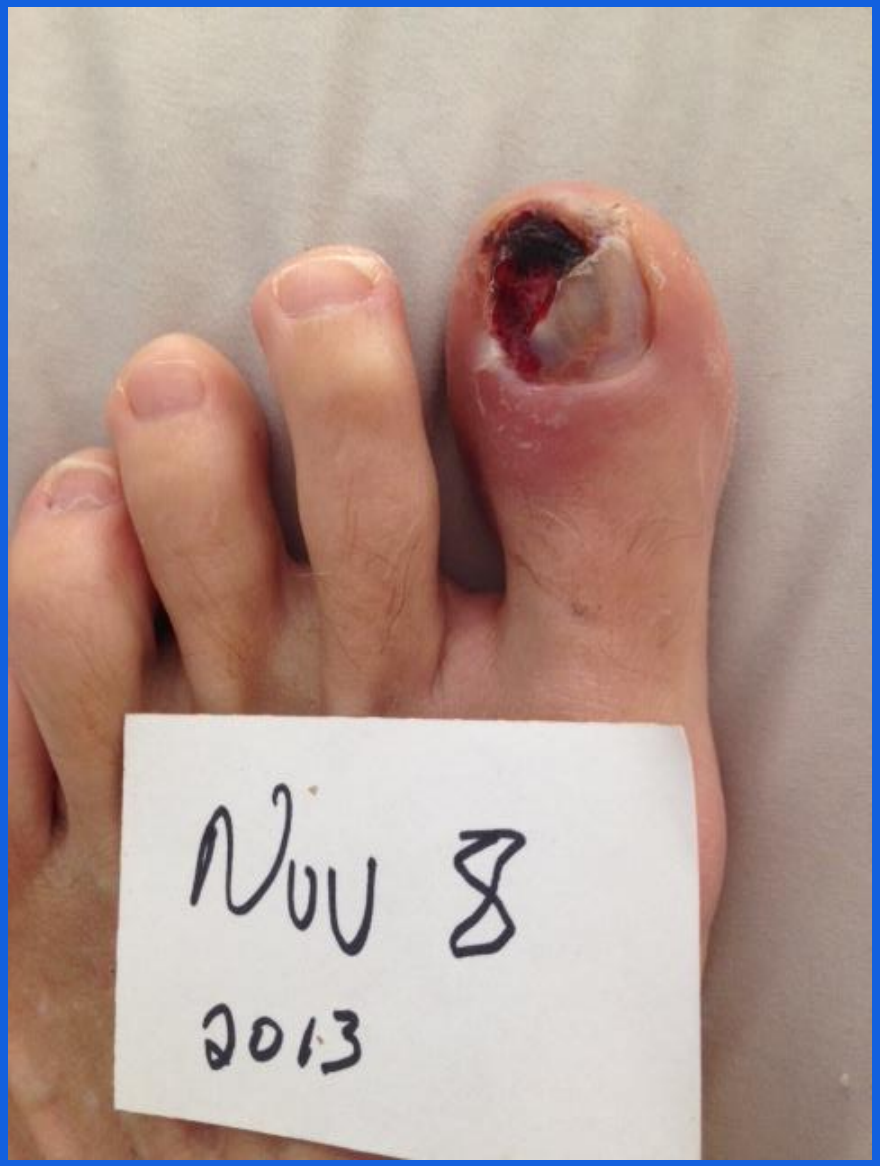


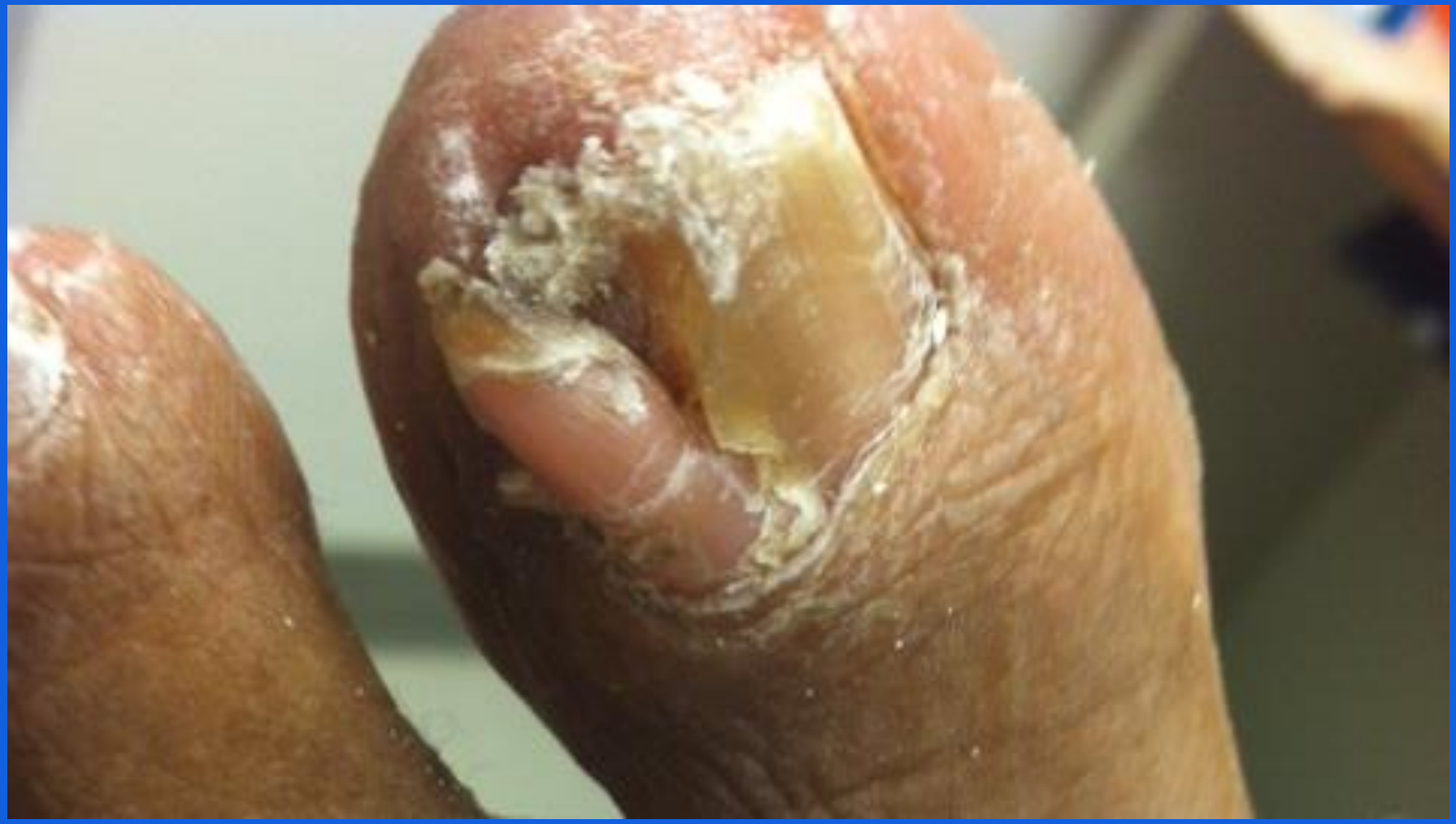
Low power view of tumor with lobules of cartilage (top left).

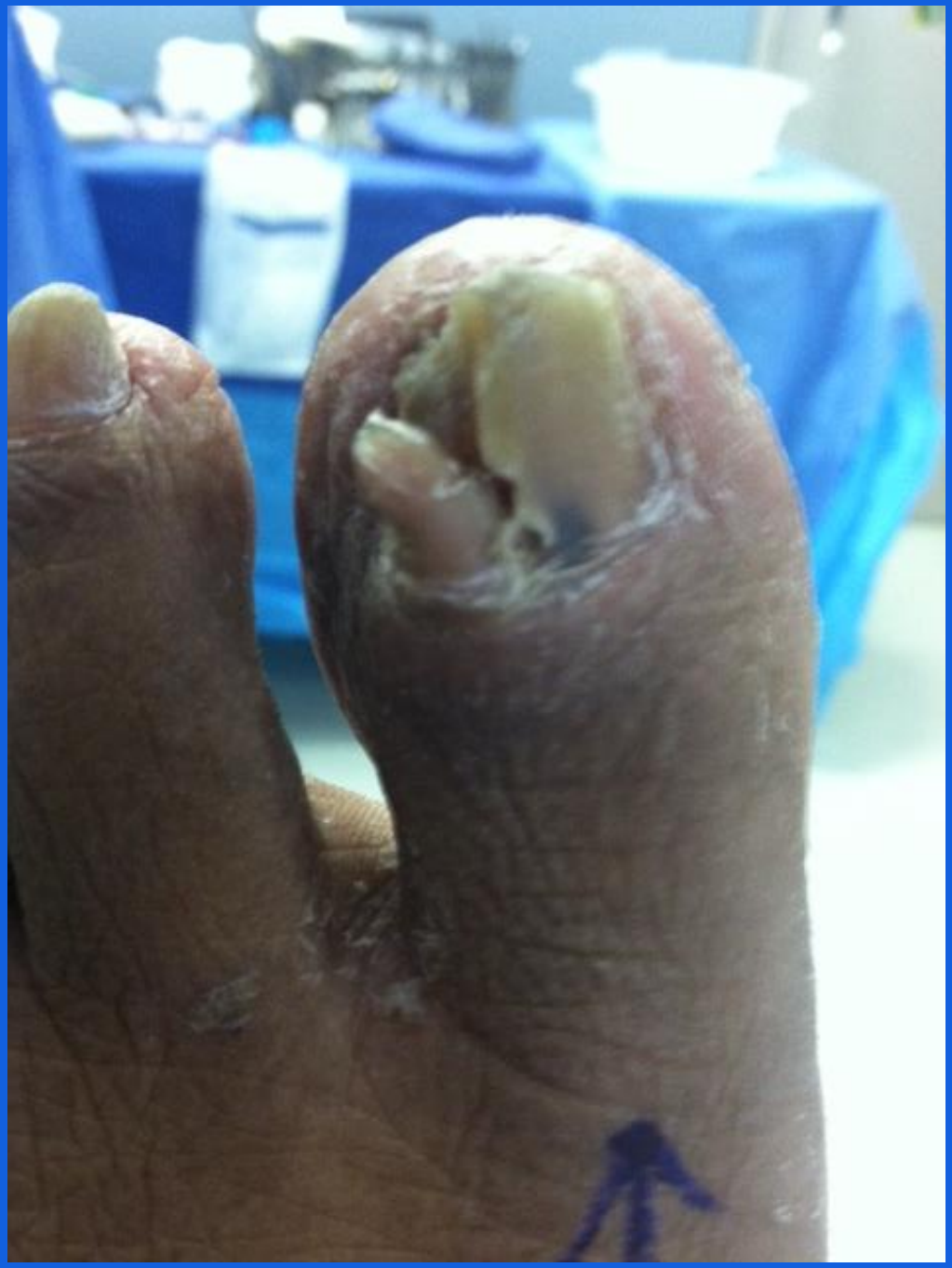
Vascular permeation (top and bottom right)

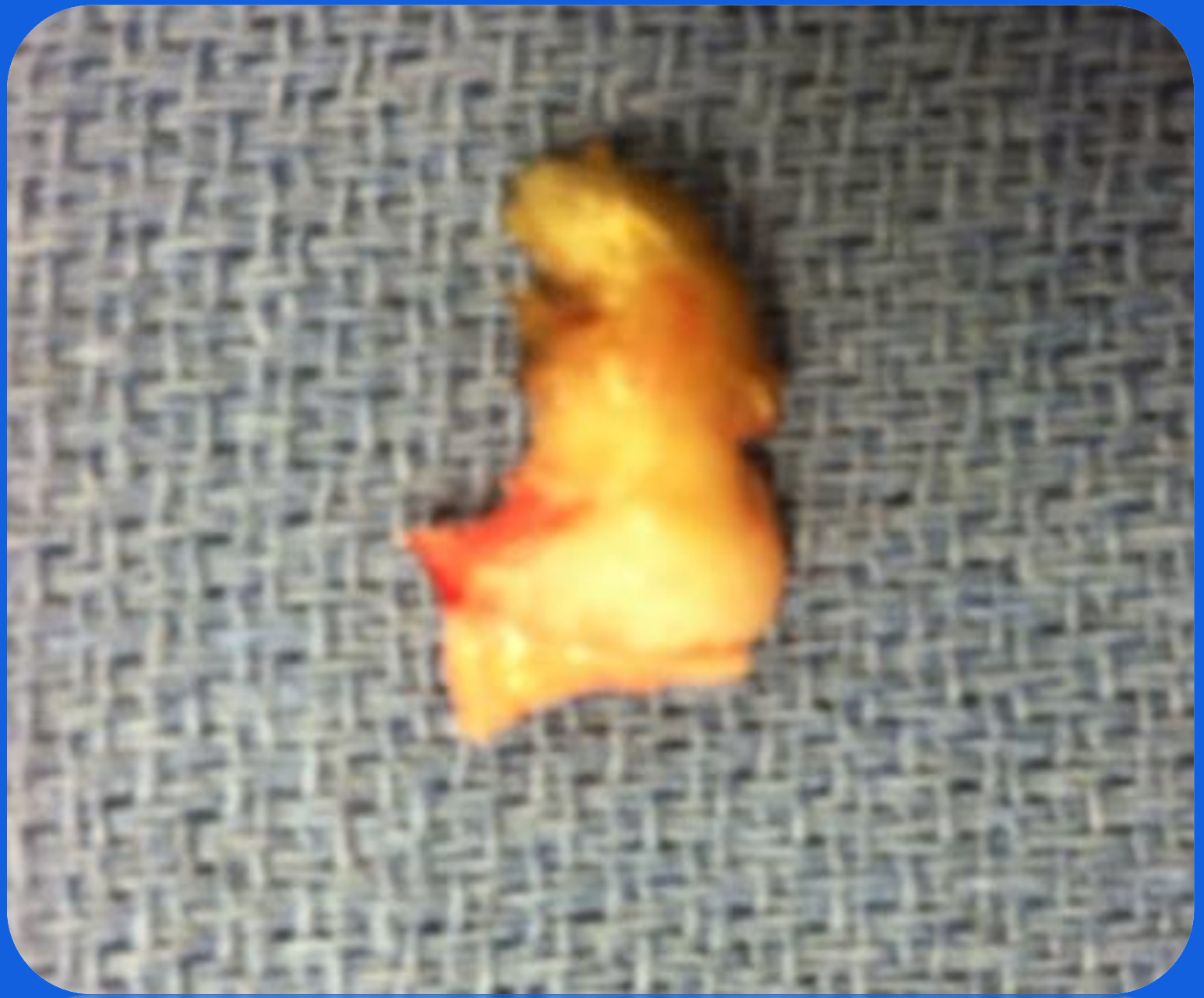


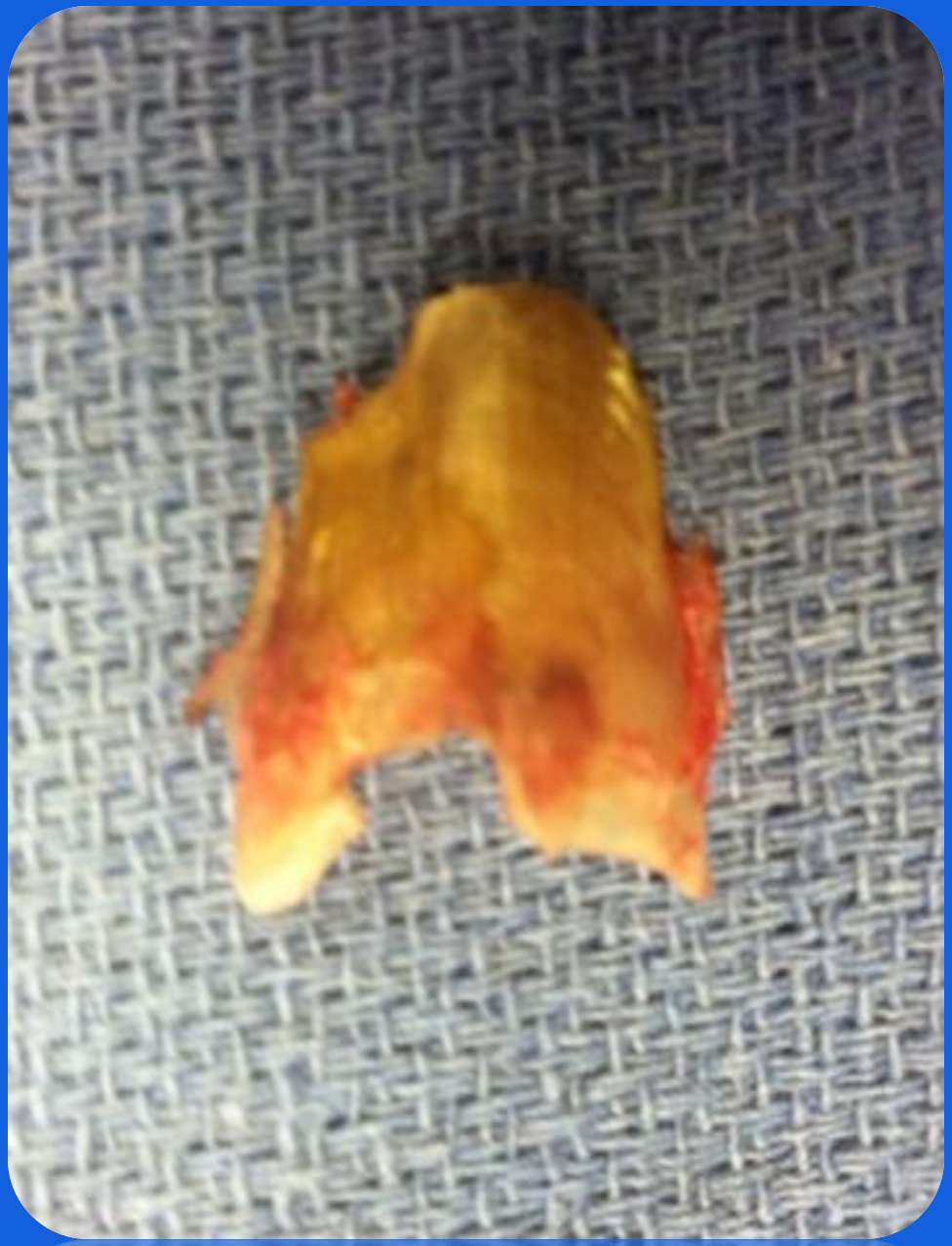
Laser Thermal Injury

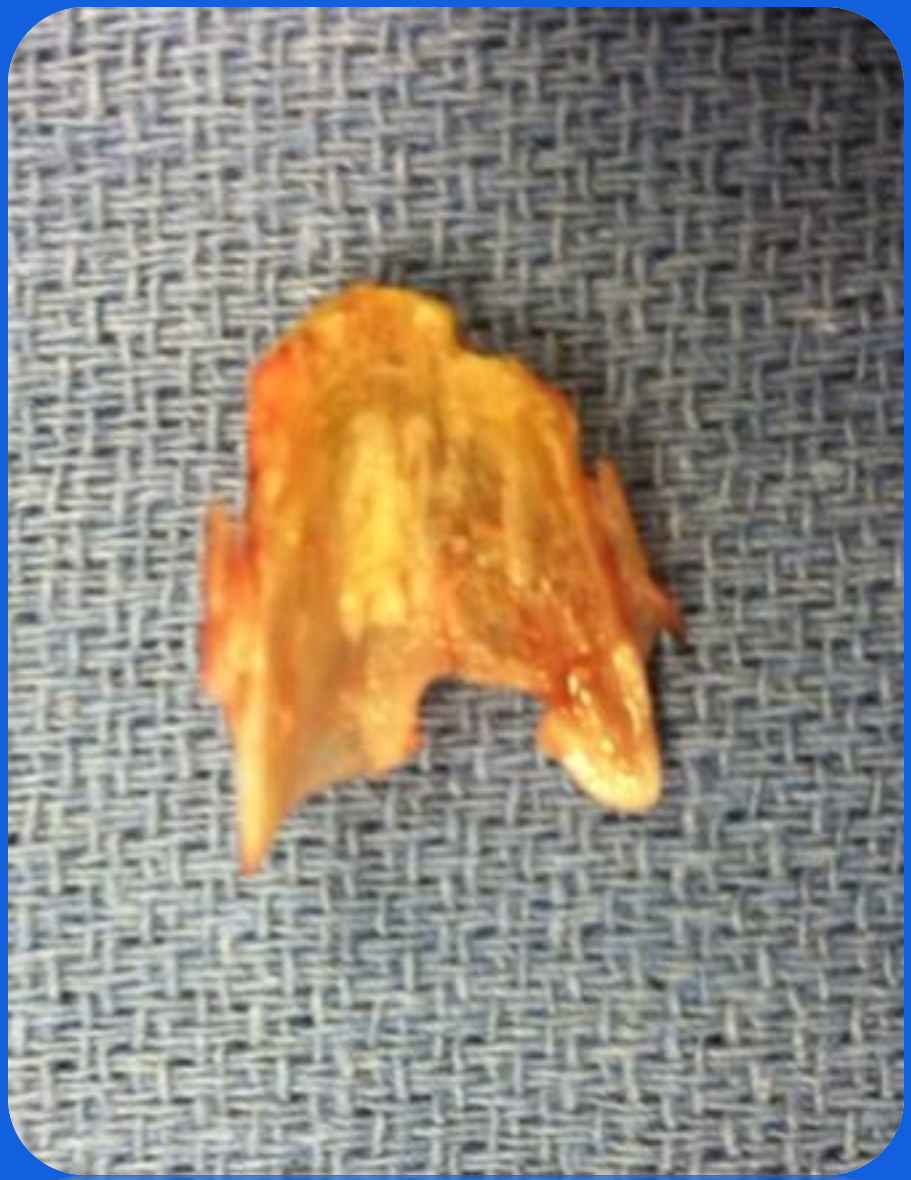


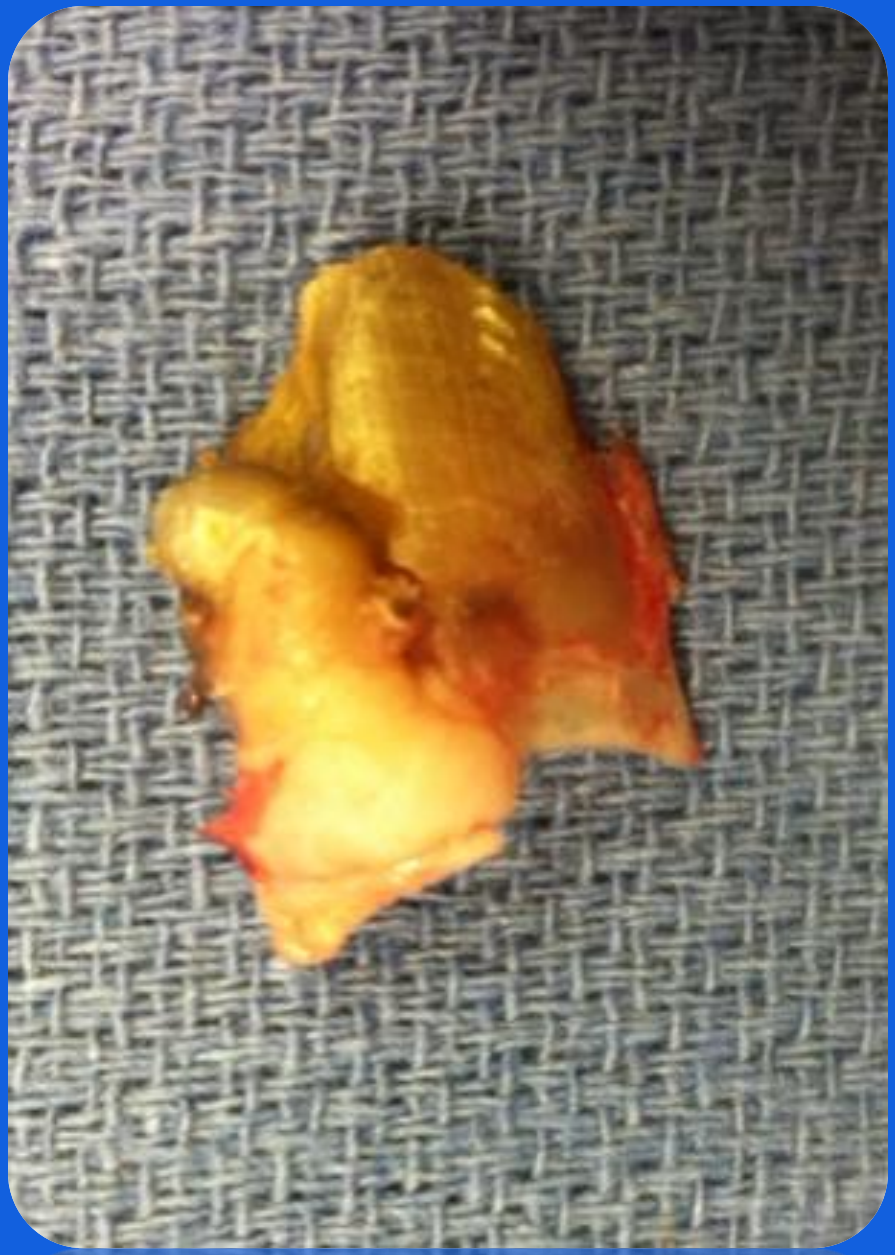


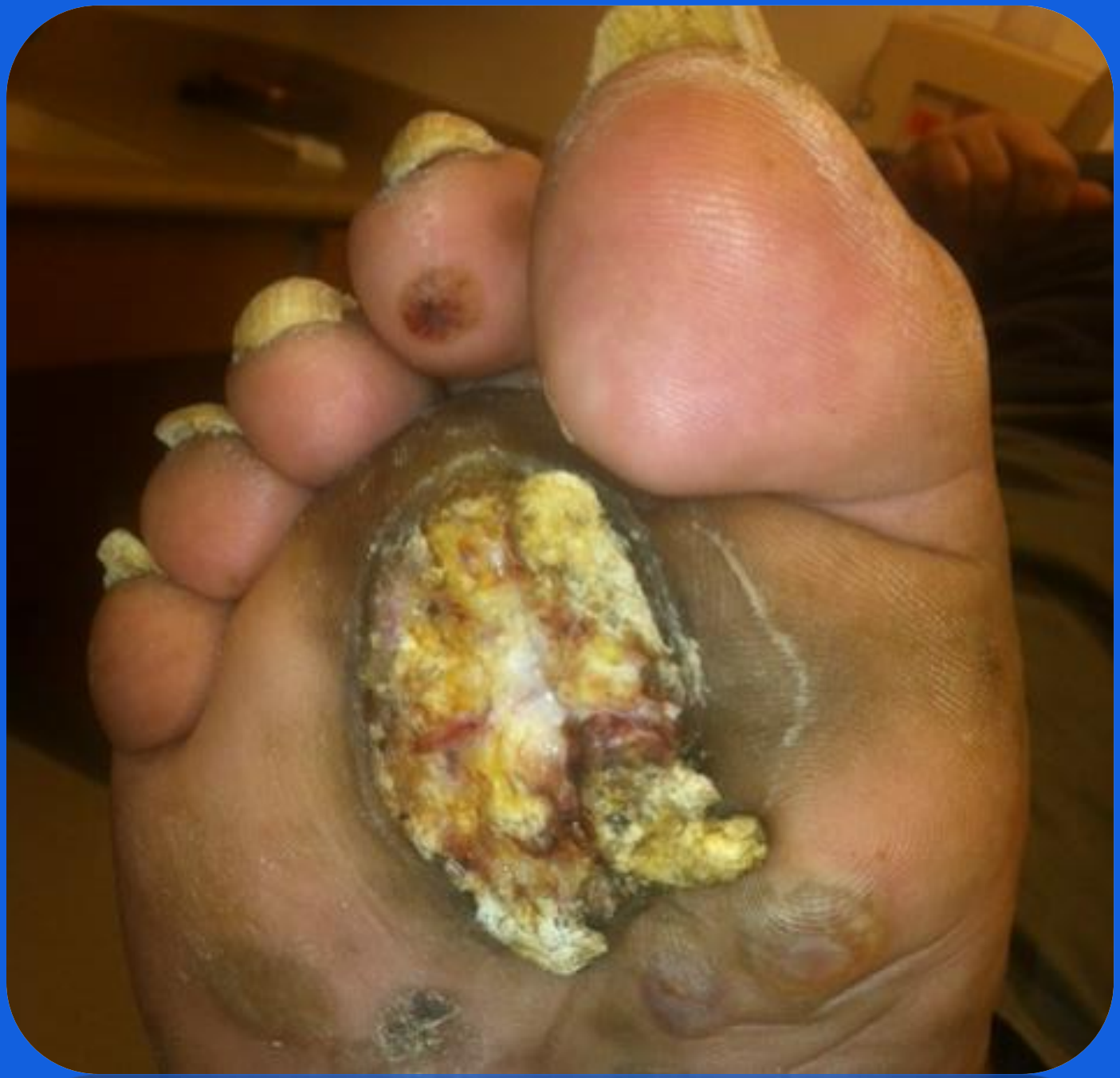


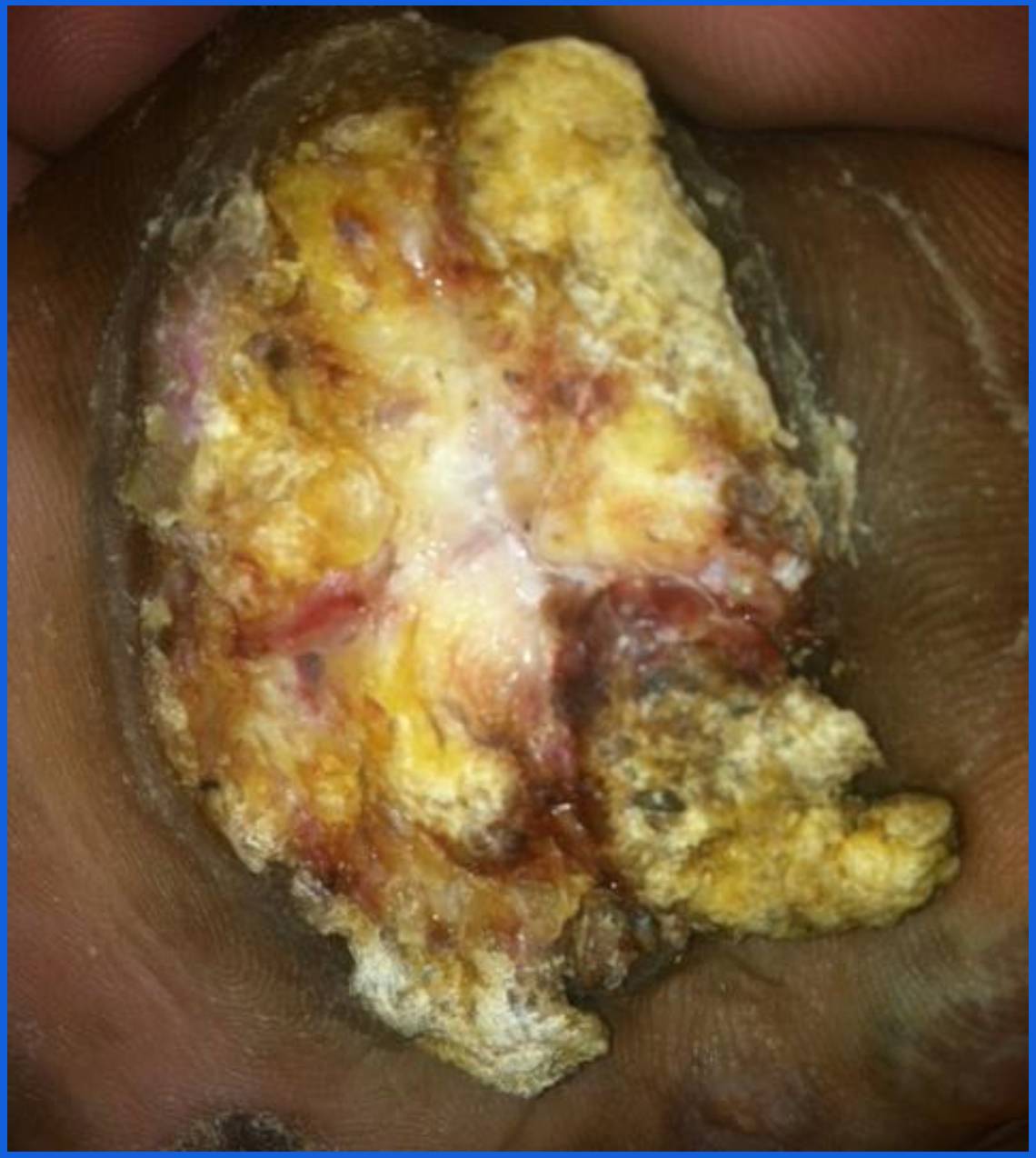


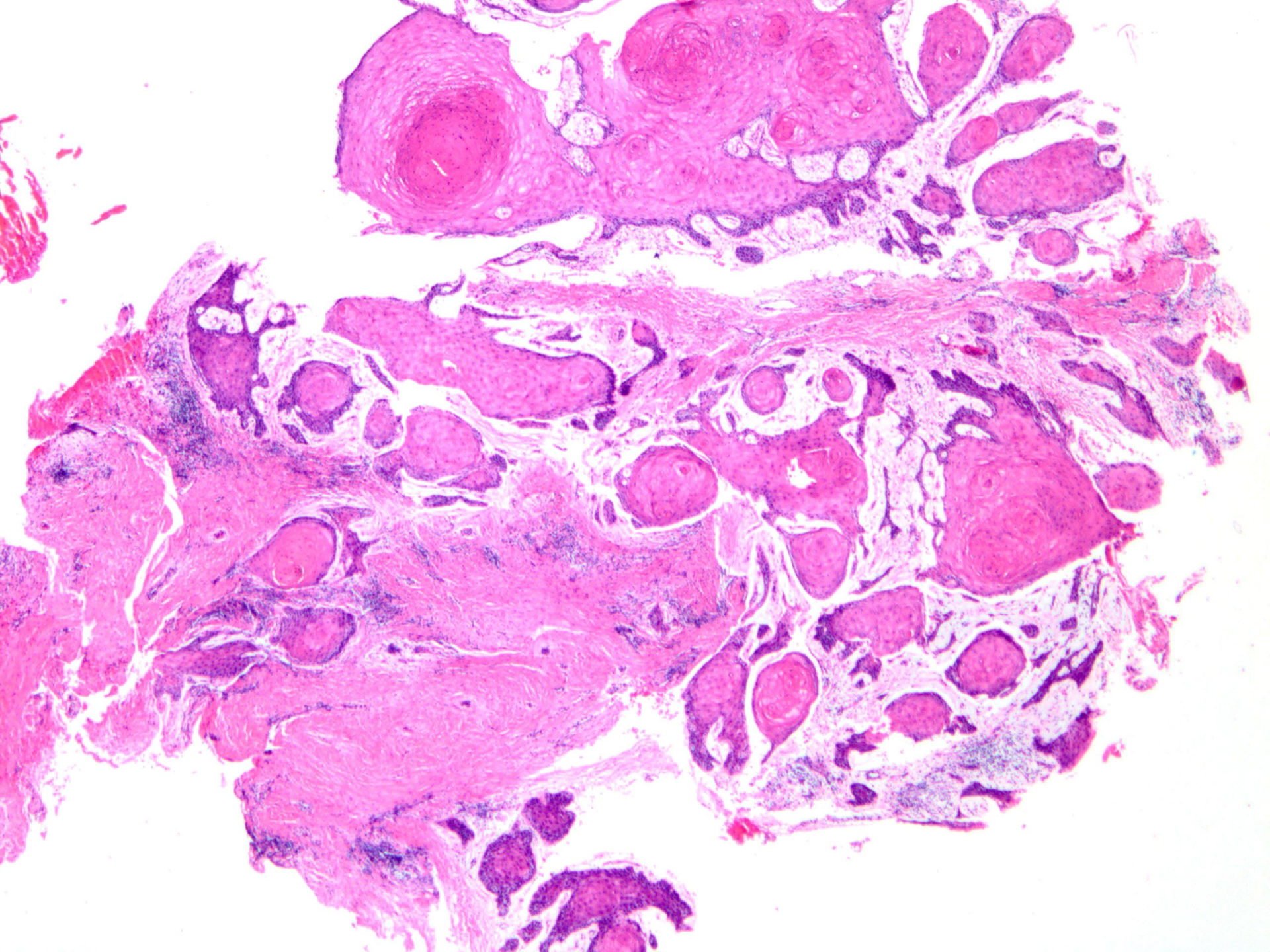


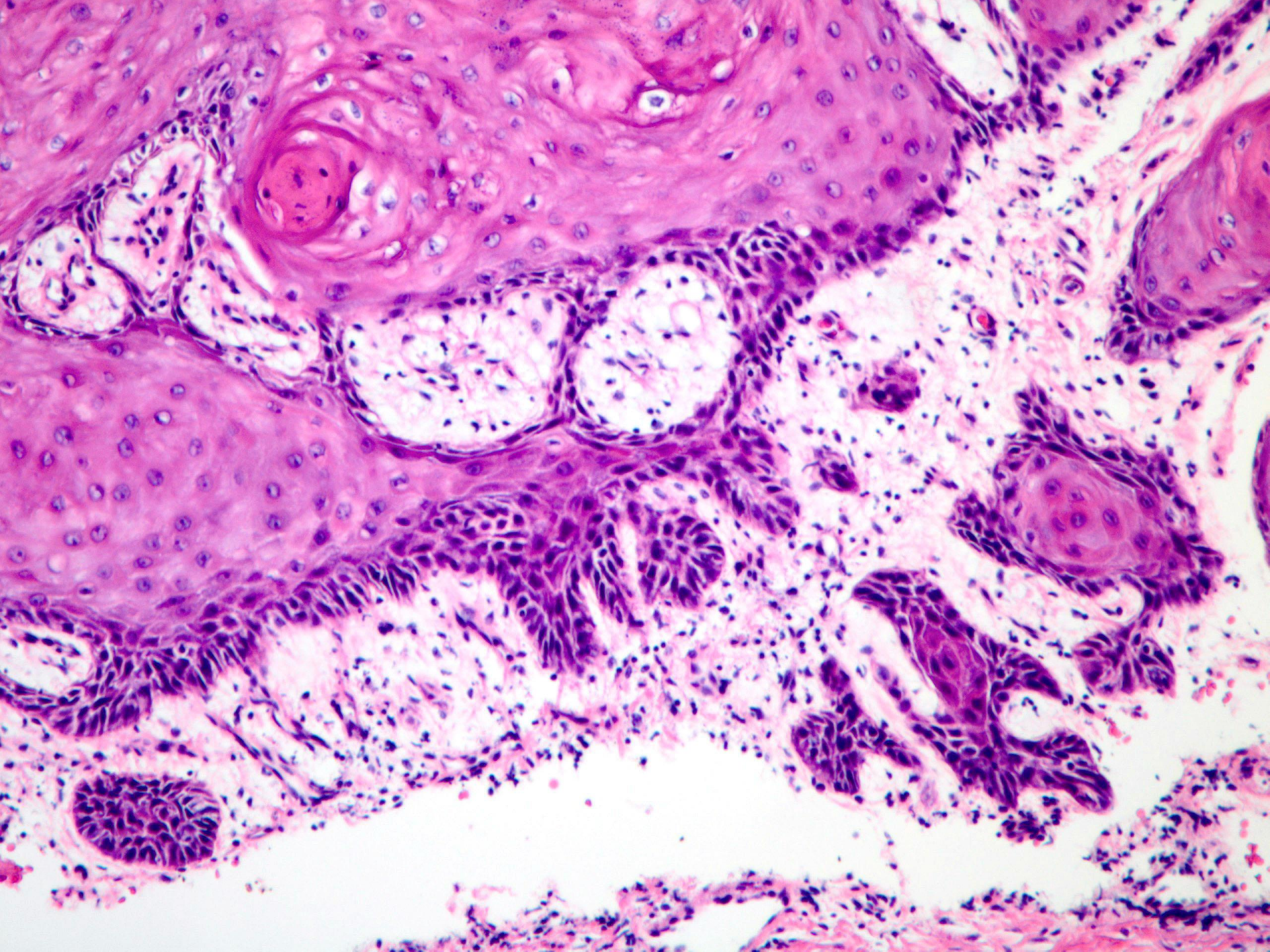


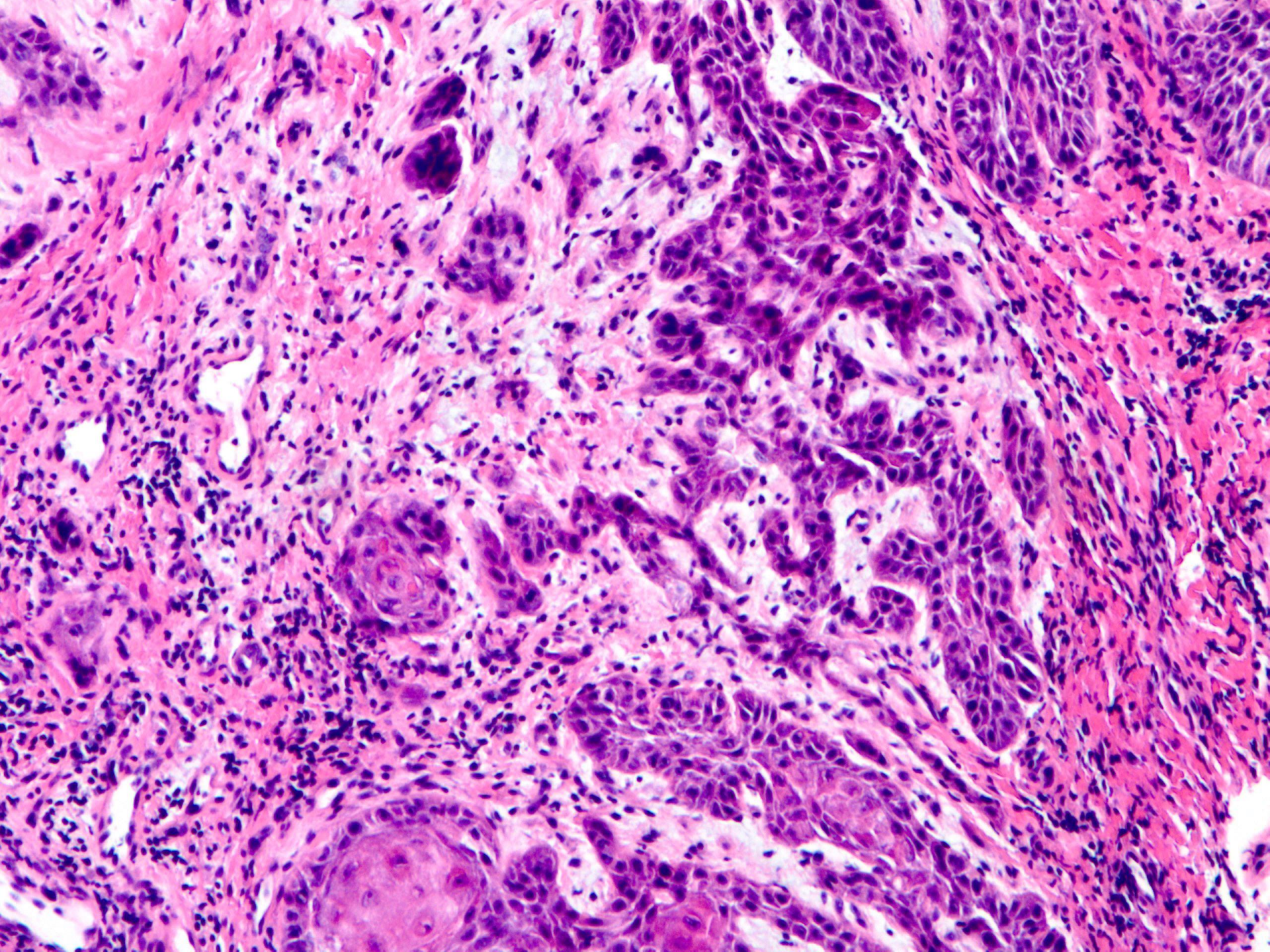


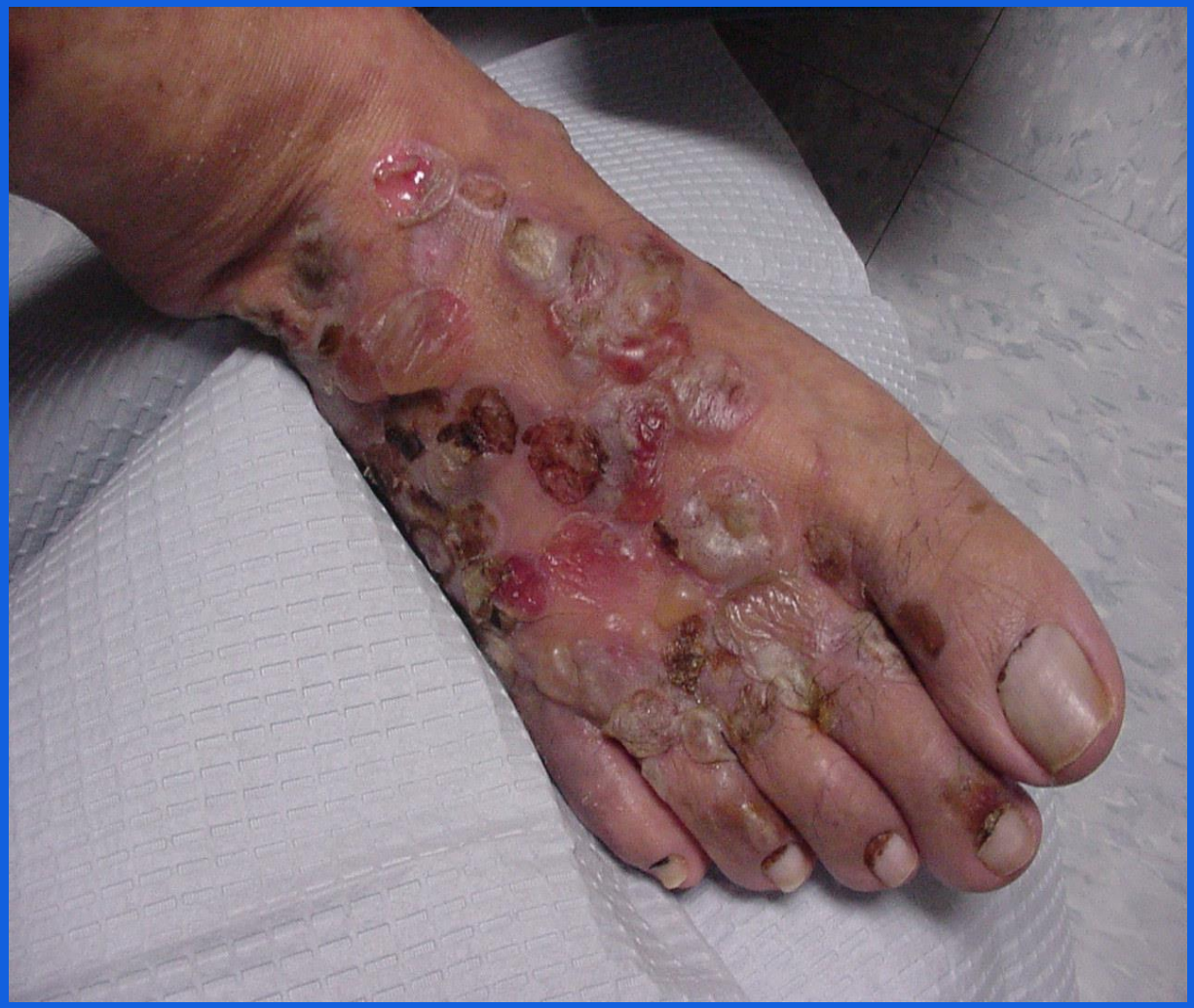


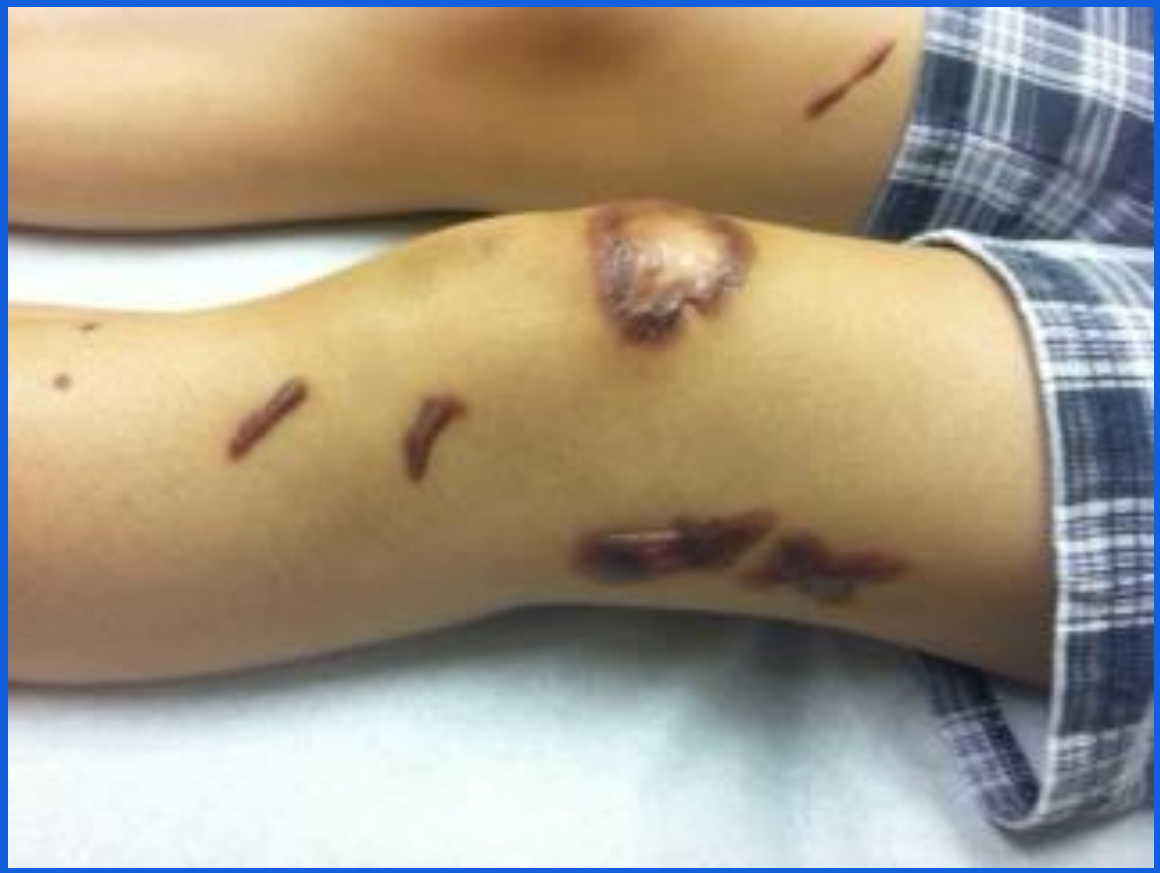


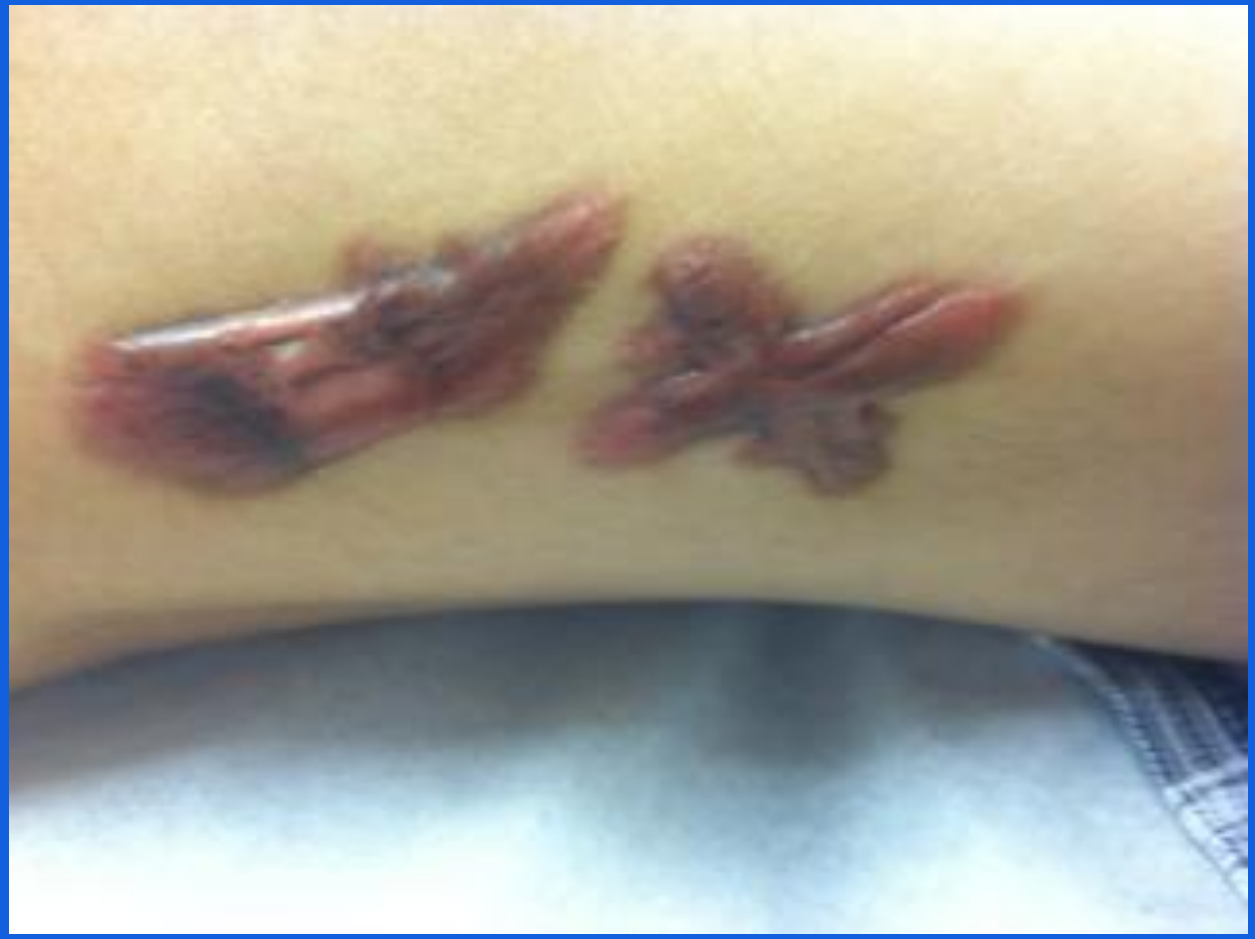


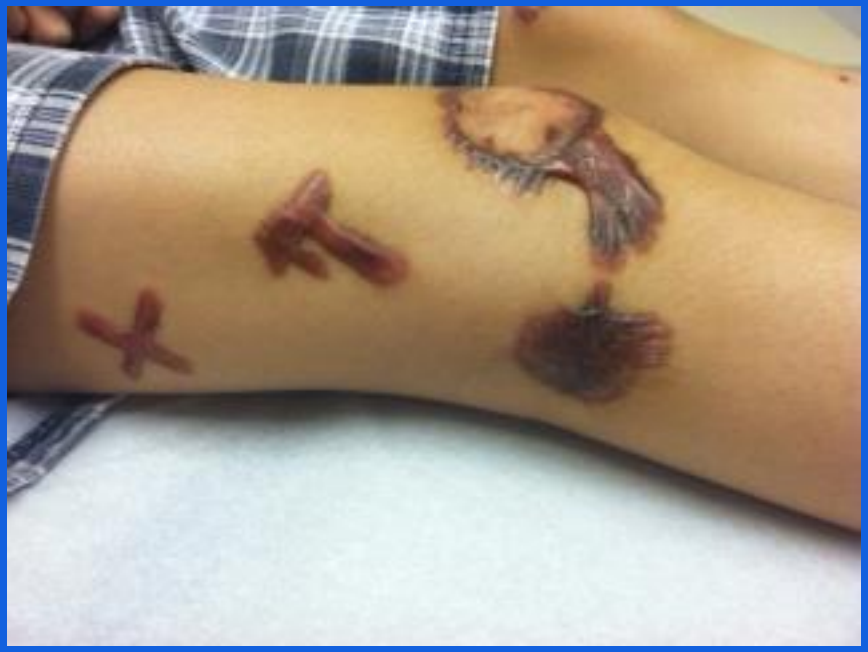


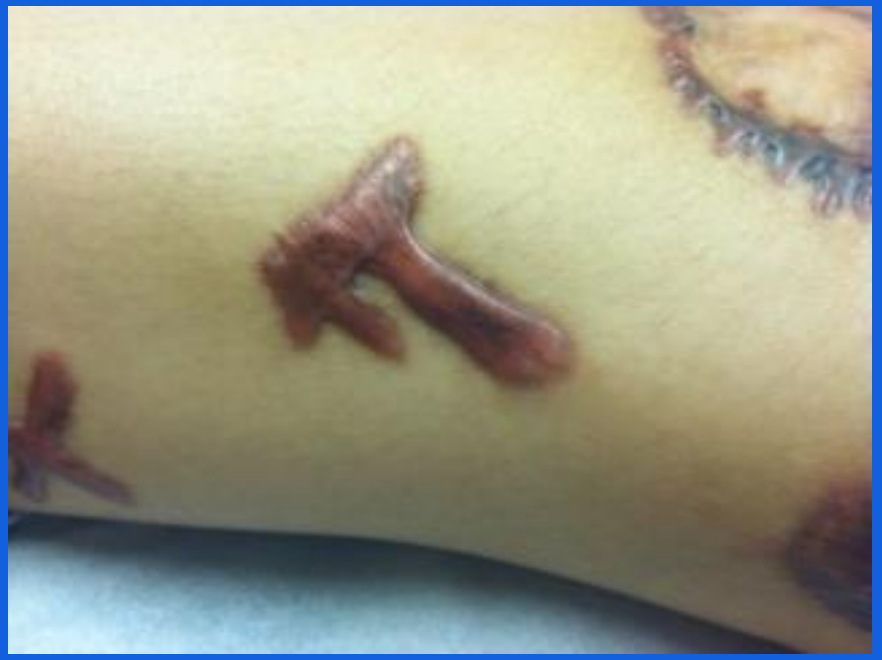


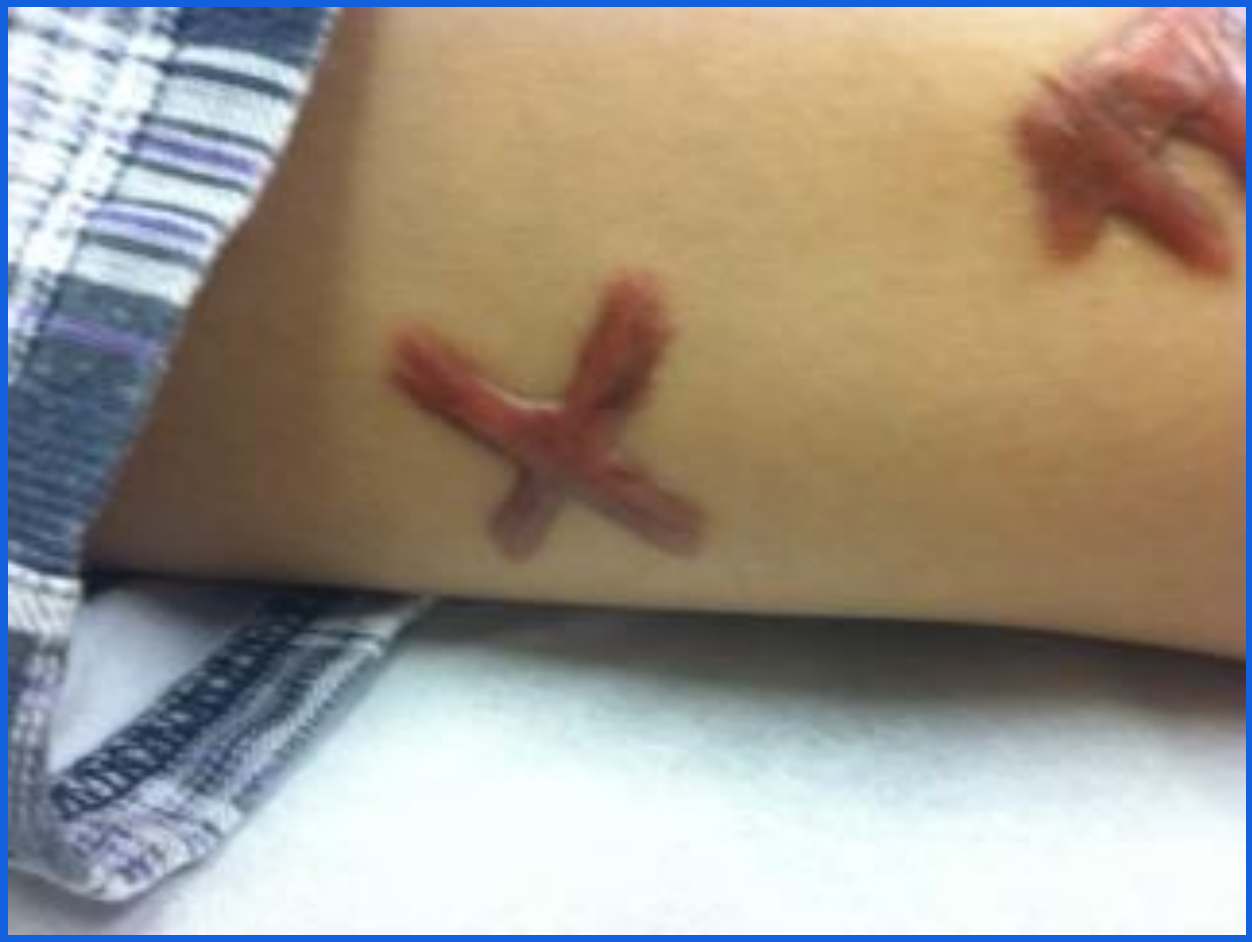


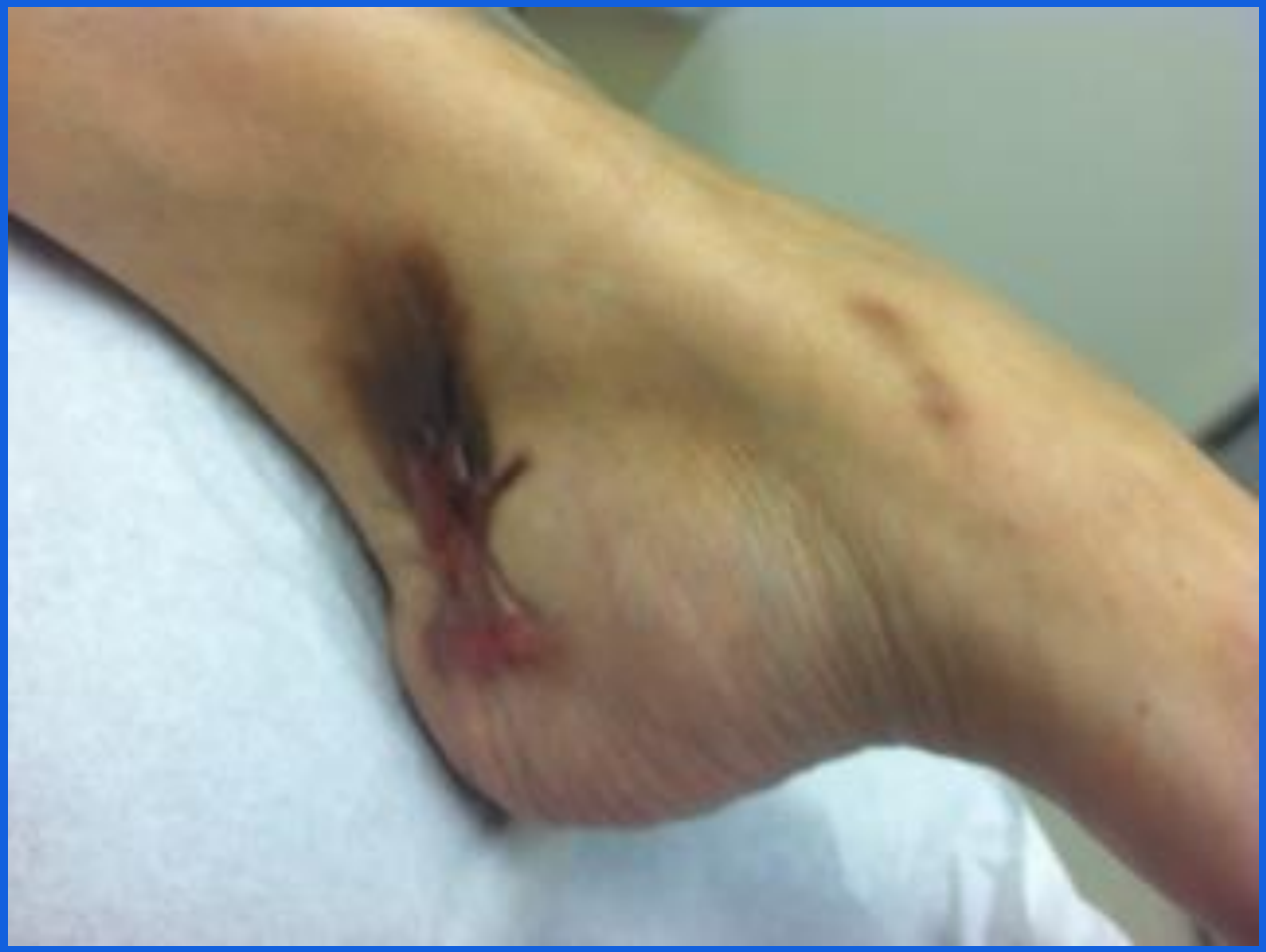


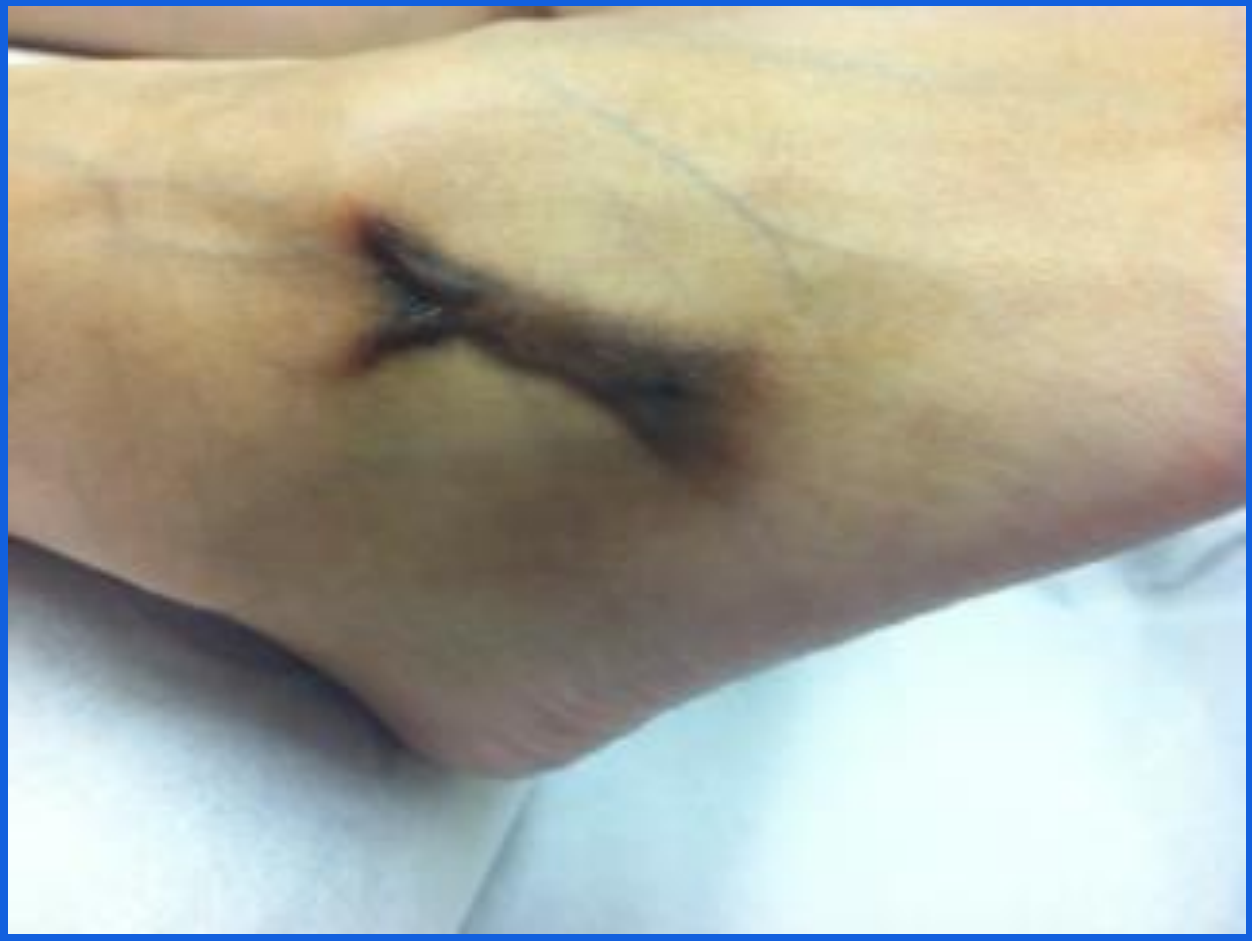


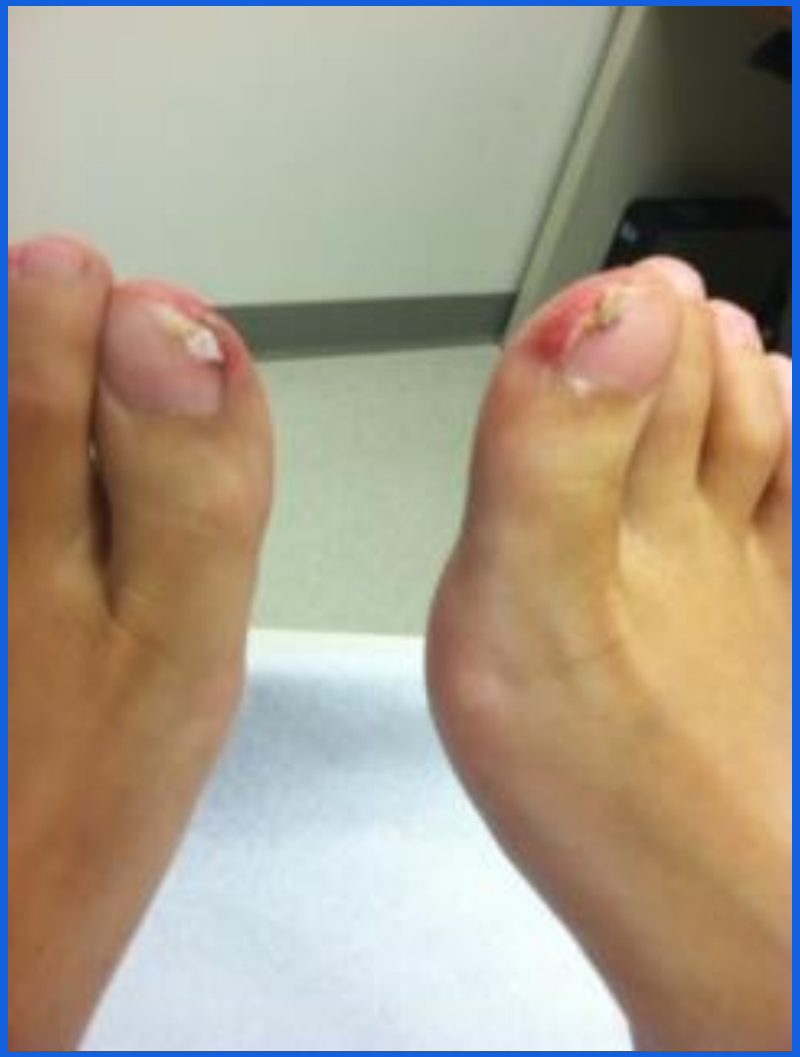










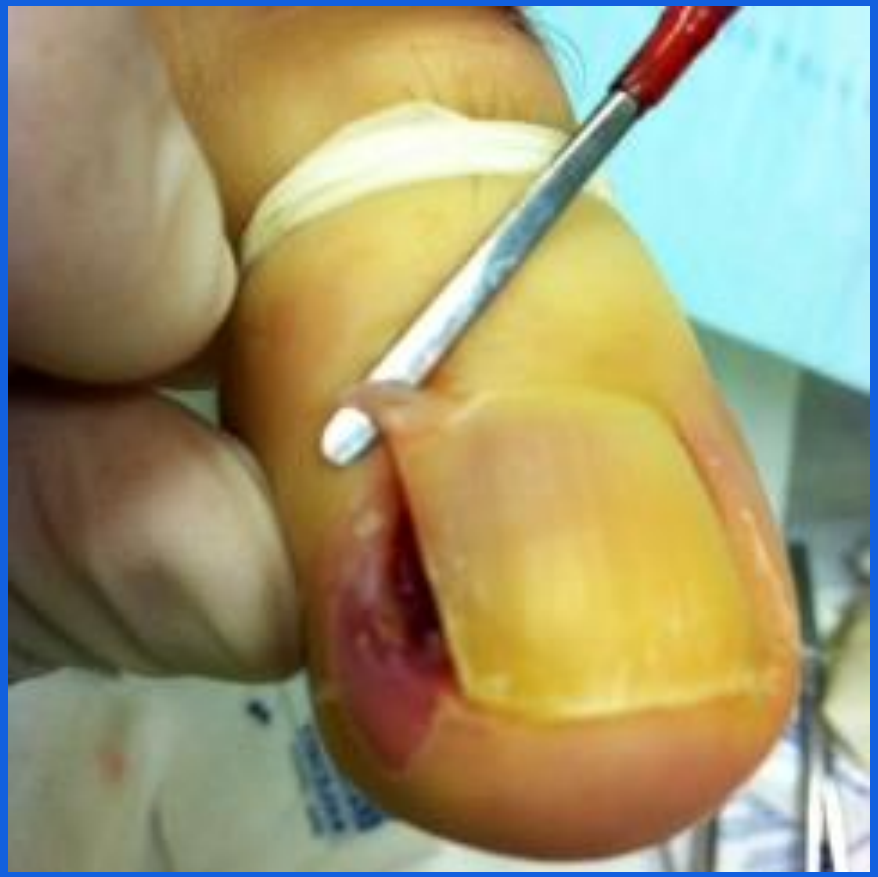


English Anvil Nail Splitter – instrument results in straight cut but:

Nail deforms away from the center if the length of the nail in the jaw is longer than the jaw itself

This leaves a piece of nail remaining in the surgical site which may prevent the phenol from destroying the matrix

In addition to a failed procedure, the remaining portion itself may result in chronic drainage if not removed



Ten toenail chronic paronychia in a patient on Camptosar, Avastin, and Erbitux

bryan.markinson@mountsinai.org

Bryan C. Markinson, DPM

The Leni and Peter W. May
Department of Orthopedic Surgery
Department of Dermatologic Surgery
Mount Sinai School of Medicine
New York City

Camptosar - Irinotecan hydrochloride
Cytotoxic DNA enzyme inhibitor

Product insert DERMATOLOGIC side effects:
Alopecia
Sweating
Rash
Hand and Foot Syndrome (Palmar-Plantar Erythrodysesthesia)

Patient reported - Camptosar Side Effects Report: 5101177-5,
Disease progression, Infection, Nail disorder, Paronychia, Skin chapped

Avastin – bevacizumab
Mechanism: anti-angiogenic

Skin side effects:
Delayed wound healing
Exfoliative dermatitis
Alopecia
Skin ulcer

Paronychia not mentioned – but may delay healing of paronychia

Erbitux – cetuximab

Erbitux is a targeted therapy that targets and binds to the epidermal growth factor receptors (EGFR) – “Signal transduction inhibitor”

Erbitux side effect profile:

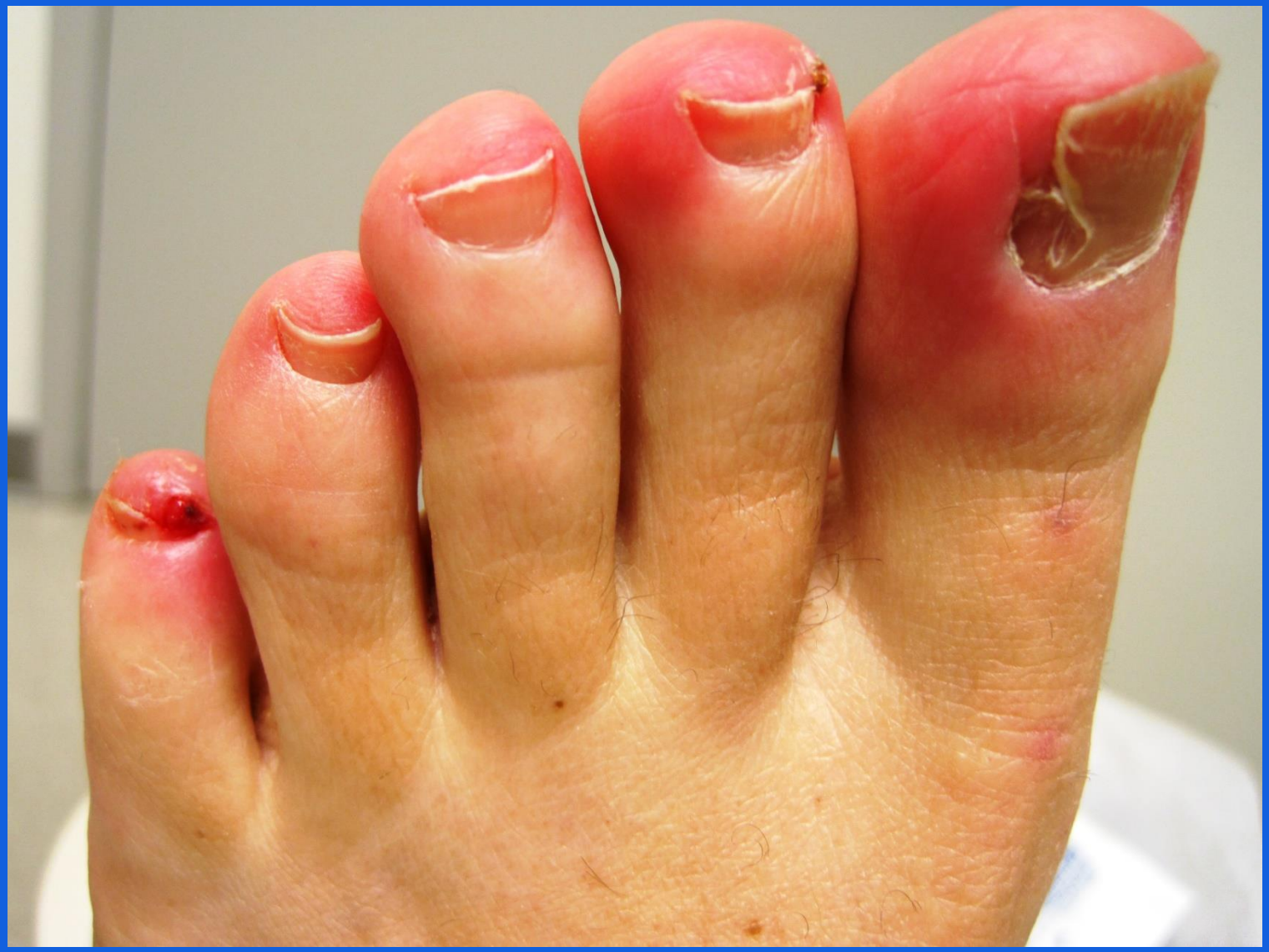
The following side effects are **common** (occurring in greater than 30%) for patients taking Erbitux:

Rash (acne-like)
Generalized weakness, malaise
Fever
Low magnesium level (see blood test abnormalities)

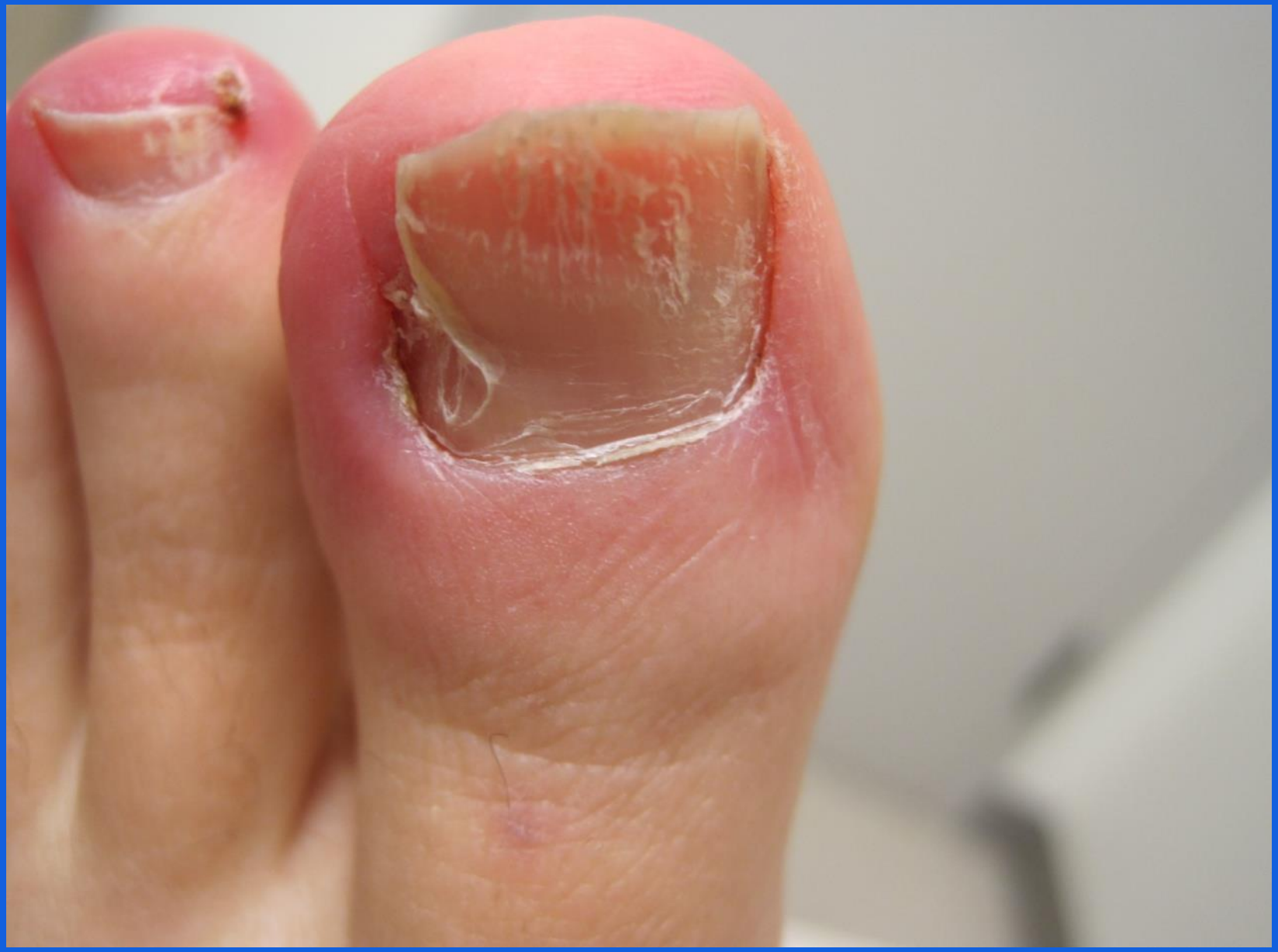
These side effects are **less common** side effects (occurring in about 10-29%) of patients receiving Erbitux:

Nausea and vomiting
Diarrhea
Constipation
Poor appetite
Headache
Abdominal pain
Nail disorder - inflammation of the skin surrounding a fingernail or toenail
Mouth sores
Swelling
Difficulty sleeping
Itching
Low red blood cell count (Anemia)
Cough

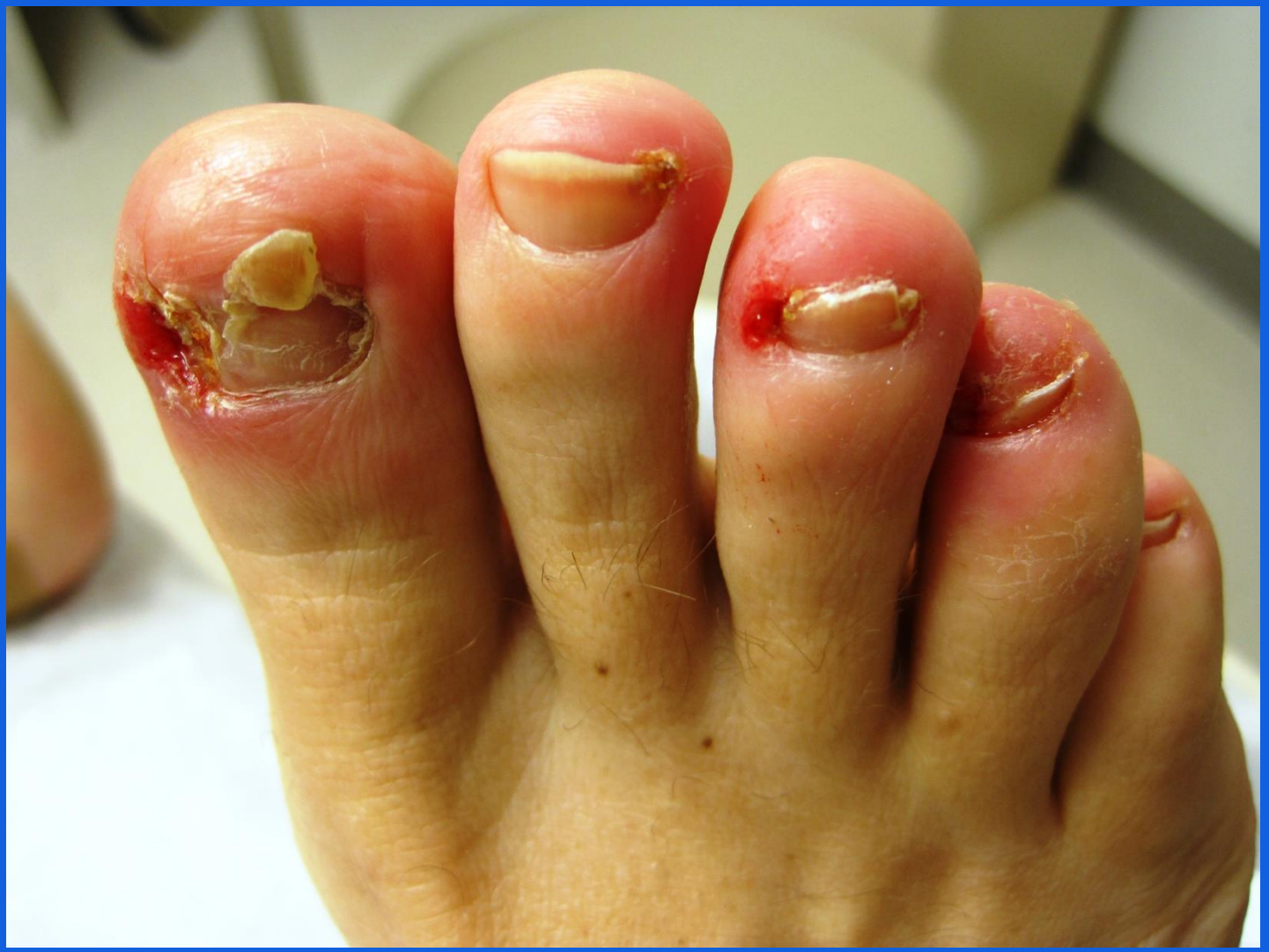
Patient: 59 years old
Dx with colon cancer in 8/05. Liver mets surgery 9/06, 5/07, and 7/08. Treated with combination Camptosar, Avastin, and Erbitux, Glucophage, Altace, Norvasc, Coreg
Complaint: severe pain in toenails causing severe limitation of ambulation.

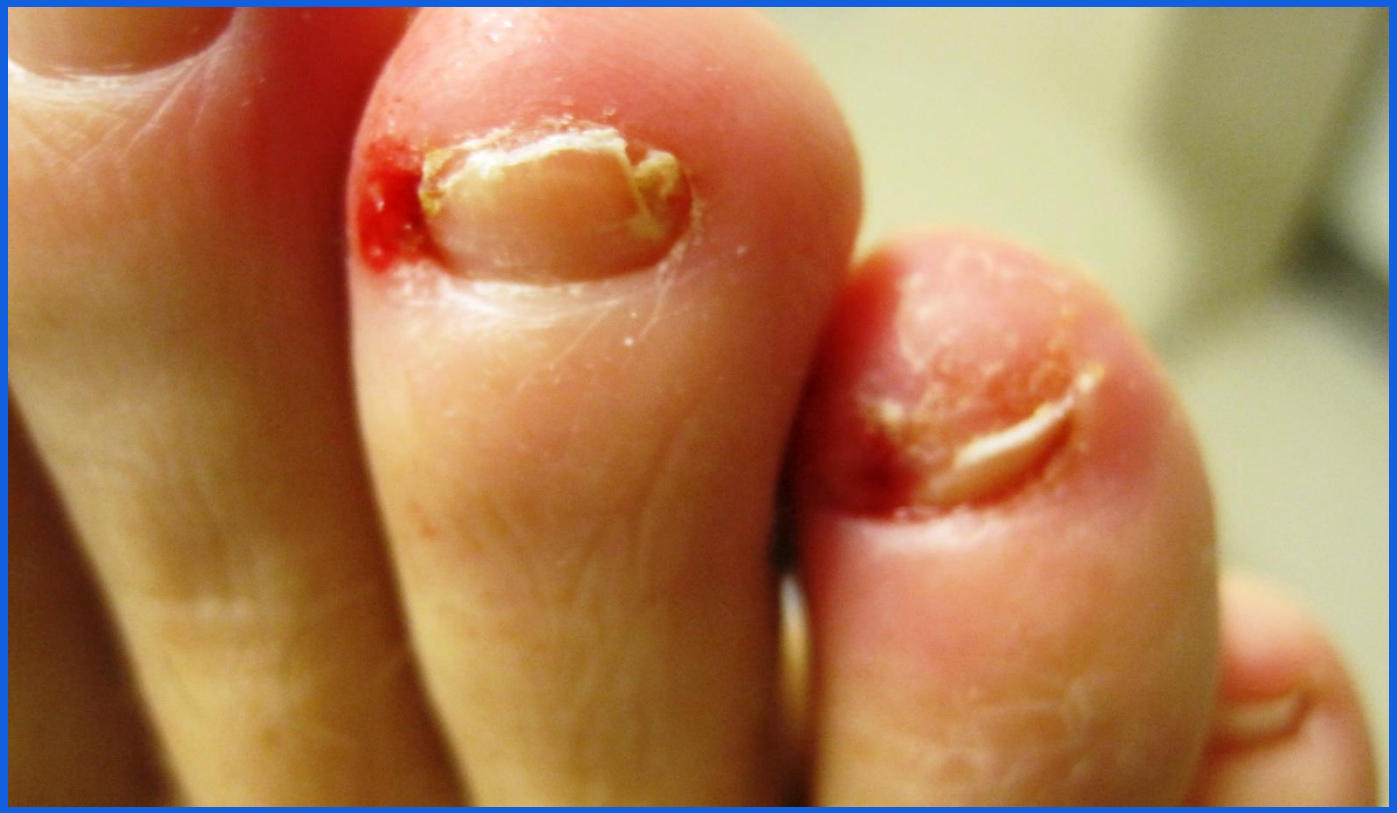


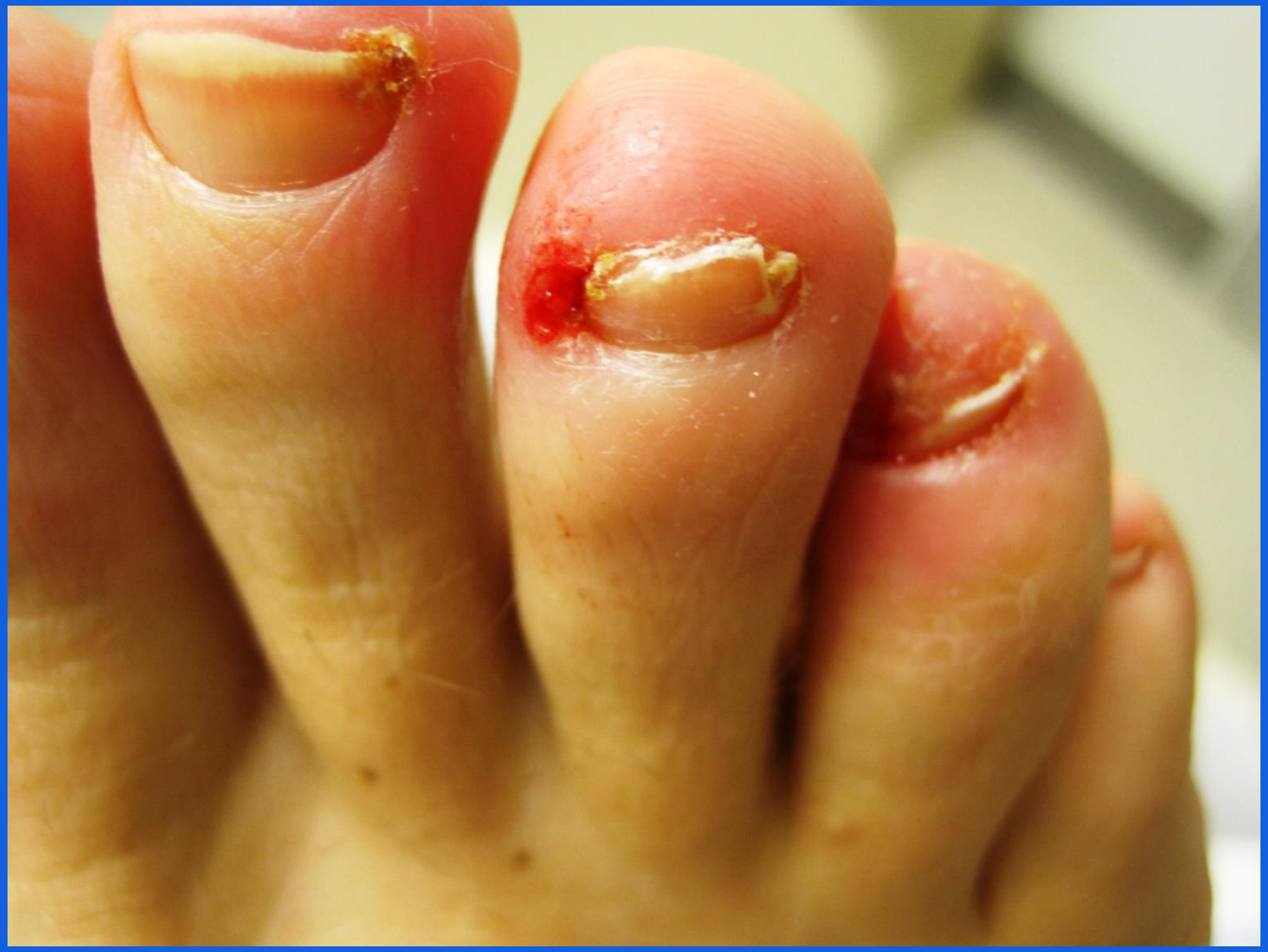
July 8, 2009

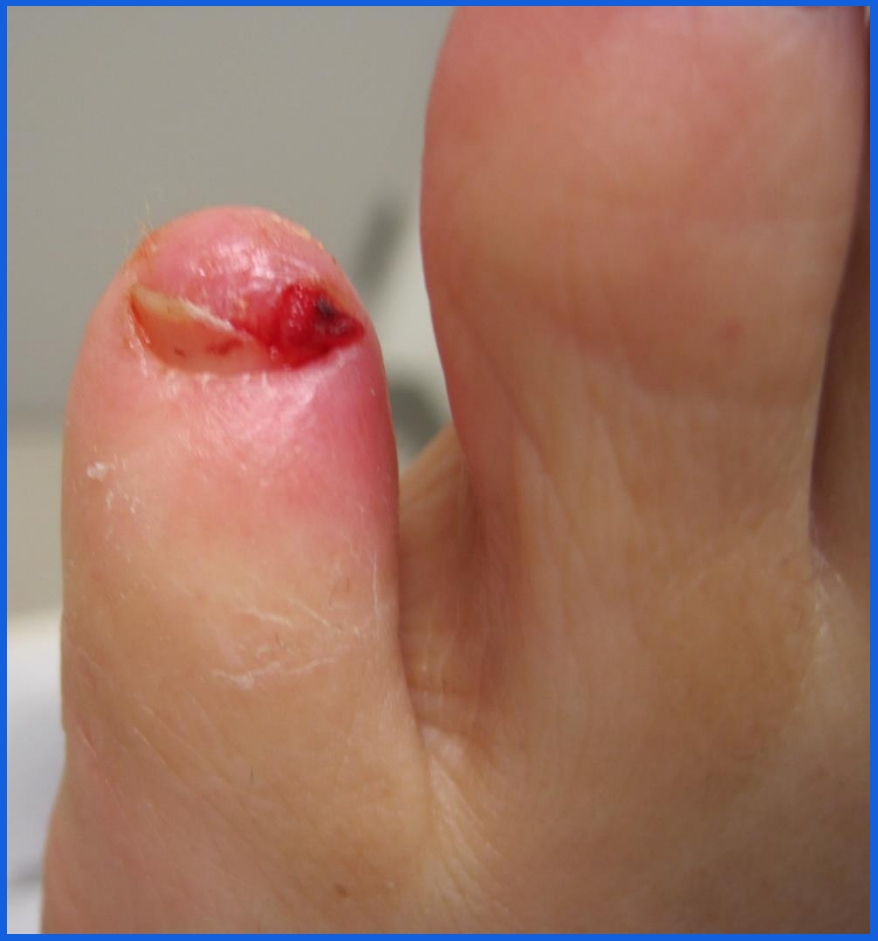


July 20th

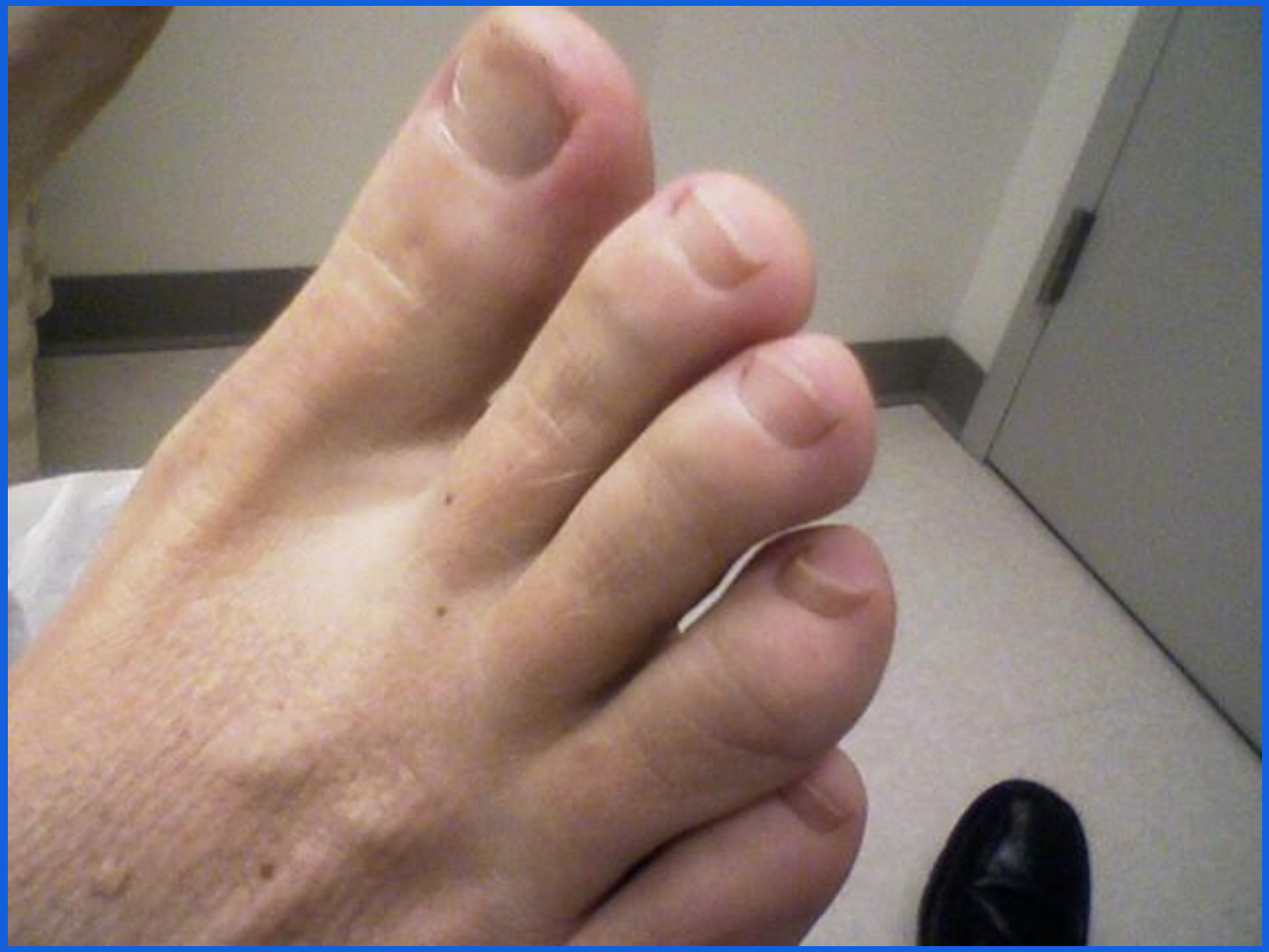




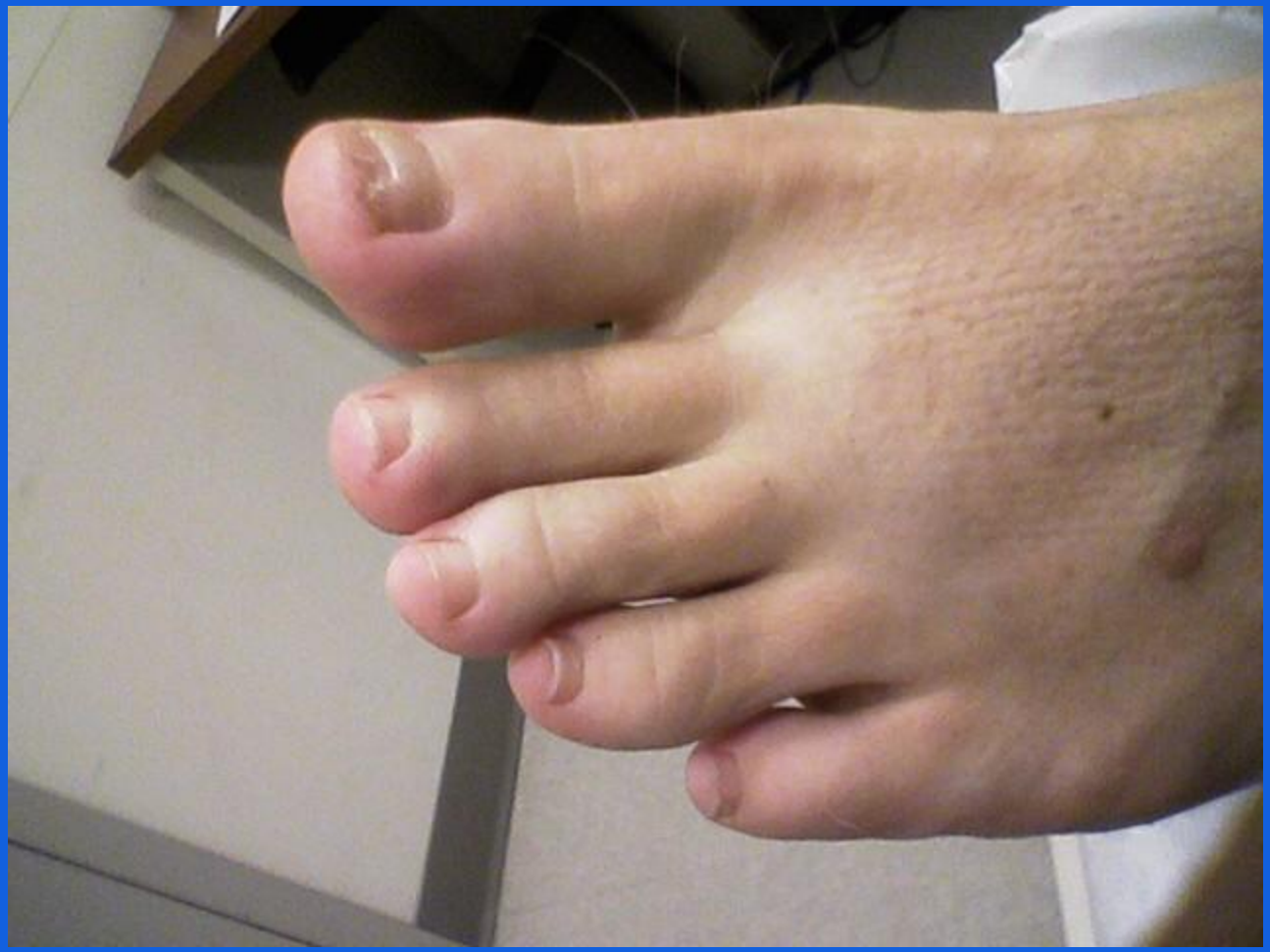




3 weeks after Erbitux stopped



3 weeks after Erbitux stopped



Observations:

1) Nails seem to be slightly more tented during treatment
2) Straight back avulsion under local anesthesia resulted in longer term resolution than repeated slant excisions
3) Nail rate of growth definitely increased – treatment required every two weeks
4) After cessation of Erbitux, nails seemed flatter and all inflammation resolved within 3 weeks.
5) Although patient was terminal, this complication had significant quality of life effect
6) Primary care physicians and even oncologists are not keenly aware of the association of chemotherapy with nail fold inflammation

9% Lidocaine Gel

Ozone infusion in washing machines

Wearable technology