Larkin Community Hospital/LECOM Dermatology Residency Program:
Updates In Medical Dermatology

PROGRAM DIRECTOR:
STANLEY SKOPIT, DO, MSE, FAOCD, FAAD
LARKIN COMMUNITY HOSPITAL DIRECTOR OF DERMATOLOGY:
FRANCISCO KERDEL, MD
Case Section: 1
Liza Brown D.O
Patient ND

RESIDENT: BLAKE SANDERS, PGY-2
ATTENDING: DR. KERDEL
59 yo male presents as a referral from Rheumatology to be evaluated for apparent fatty deposition in the bilateral arms. Onset was first noticed in May 2015 and ensued immediately after intensive inpatient treatment for Henoch-Schonlein Purpura. Patient states that the lesions are non-tender and swell intermittently.

ALLERGIES: fluconazole
MEDICATIONS: lisinopril, omeprazole, atenolol
PAST MEDICAL HISTORY: detached retina, HTN, HSP, GERD
Madelung’s Disease: Case Report and Discussion of Treatment Options

Adamo, Ciro MD, PhD*; Vescio, Giuseppina MD†; Battaglia, Massimiliano MD†; Gallelli, Giuseppe MD†; Musella, Stefano MD†
Madelung’s Disease: Revision of 59 Surgical Cases
Patient WS

RESIDENT: BLAKE SANDERS, PGY-2
ATTENDING: DR. KERDEL
HPI

47 y/o male presents complaining of a large violaceous lesion on his left chest that began approximately 7 months prior. Lesion is non tender, non progressive.

ROS negative for chest pain, dyspnea, cough, abdominal pain, fever, night sweats, weight loss.

ALLERGIES: NKDA

MEDICATIONS: none

PAST MEDICAL HISTORY: Radiation Therapy to the neck for an unspecified mass
Despite the clinical description, I believe that the appearances in the biopsy fit best with a **multinucleate cell angiohistiocytoma**. The lesion shows a poorly margined intradermal proliferation of vessels, adjacent to which, within dermis, there are spindled and histiocytoid cells including quite numerous multinucleate giant cells. There is no endothelial atypia or multilayering and there is nothing here which is worrisome for malignancy. Lesions of this type are more often characterized by multiple clustered papules having a vascular appearance. It remains controversial as to whether these lesions represent a reactive process (as seems most likely) or else a benign neoplasm. Certainly they appear to have no tendency for local aggression.

With best wishes and thanks again.

Yours sincerely,

Christopher D.M. Fletcher, M.D., FRCPath
CDMP:ag/36;encl.
A pediatric case of multinucleate cell angiohistiocytoma responsive to intralesional triamcinolone

Nikita Lakdawala, MD, University of Connecticut, Farmington, CT, United States; Michael Murphy, MD, University of Connecticut, Farmington, CT, United States; Justin Finch, MD, University of Connecticut, Farmington, CT, United States
Patient KK

RESIDENT: DR. WHITE, PGY-3
ATTENDING: DR. KERDEL
20 y/o F with PMHx acne and pyoderma gangrenosum. Patient failed topical therapy including protopic, elidel, and clobetasol. Patient has been on oral prednisone and cyclosporine in the past. She was started on Apremilast 30mg BID.
Upon presentation
2 months of Rx Apremilast
6 mo. on Apremilast
Pediatric Pyoderma Gangrenosum: A Retrospective Review of Clinical Features, Etiologic Associations, and Treatment.

Schoch JJ, Tolkachjov SN, Cappel JA, Gibson LE, Davis DM.

**TABLE 3. Clinical Features of 13 Children with Pyoderma Gangrenosum**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purulent or vegetative base</td>
<td>10 (77)</td>
</tr>
<tr>
<td>Blue-purple undermined border</td>
<td>9 (69)</td>
</tr>
<tr>
<td>Cribriform scarring</td>
<td>3 (23)</td>
</tr>
<tr>
<td>Fevers of unknown origin</td>
<td>2 (15)</td>
</tr>
<tr>
<td>Distribution of lesions</td>
<td></td>
</tr>
<tr>
<td>Lower extremities</td>
<td>10 (77)</td>
</tr>
<tr>
<td>Trunk</td>
<td>10 (77)</td>
</tr>
<tr>
<td>Upper extremities</td>
<td>5 (38)</td>
</tr>
<tr>
<td>Head and neck</td>
<td>5 (38)</td>
</tr>
<tr>
<td>Pyoderma gangrenosum variant</td>
<td></td>
</tr>
<tr>
<td>Classic ulcerative</td>
<td>10 (77)</td>
</tr>
<tr>
<td>Pustular</td>
<td>8 (62)</td>
</tr>
<tr>
<td>Peristomal</td>
<td>5 (38)</td>
</tr>
</tbody>
</table>

*Patients had overlapping features.

**TABLE 4. Therapy for 13 Children with Pyoderma Gangrenosum**

<table>
<thead>
<tr>
<th>Treatment</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topical or local</td>
<td></td>
</tr>
<tr>
<td>Tacrolimus</td>
<td>4 (31)</td>
</tr>
<tr>
<td>Topical corticosteroids</td>
<td>3 (23)</td>
</tr>
<tr>
<td>Intraleisional corticosteroids</td>
<td>3 (23)</td>
</tr>
<tr>
<td>Other (e.g., antiseptic dressings)</td>
<td>4 (31)</td>
</tr>
<tr>
<td>Systemic</td>
<td></td>
</tr>
<tr>
<td>Corticosteroids</td>
<td>8 (62)</td>
</tr>
<tr>
<td>Sulfasalazine or related 5-aminosalicylate drugs</td>
<td>6 (46)</td>
</tr>
<tr>
<td>Biologic agents</td>
<td>2 (15)</td>
</tr>
<tr>
<td>Azathioprine or 6-mercaptopurine</td>
<td>2 (15)</td>
</tr>
<tr>
<td>Mycophenolate mofetil</td>
<td>2 (15)</td>
</tr>
<tr>
<td>Dapsone</td>
<td>2 (15)</td>
</tr>
<tr>
<td>Cyclosporine</td>
<td>1 (8)</td>
</tr>
<tr>
<td>Tacrolimus</td>
<td>1 (8)</td>
</tr>
<tr>
<td>Anakinra</td>
<td>1 (8)</td>
</tr>
</tbody>
</table>
New Therapeutic Options


Intralesional methotrexate as an adjuvant treatment for pyoderma gangrenosum: A case report.

Del Puerto C¹, Navarrete-Dechent CP¹, Carrasco-Zuber JE¹, Vera-Kellet C².

Figure 1: Painful ulcer with undermined borders, at first visit.

Figure 3: Almost complete response after the seventh injection of intralesional methotrexate.
New Therapeutic Options

**Topical timolol for the treatment of pyoderma gangrenosum.**
Moreira C¹,², Lopes S¹, Cruz MJ¹,², Azevedo F¹.

**High-dose ustekinumab for the treatment of severe, recalcitrant pyoderma gangrenosum.**
Greb JE¹, Gottlieb AB¹, Goldminz AM¹.
Patient LC

RESIDENT: DR. GHERGHINA, PGY-3
ATTENDING: DR. KERDEL
HPI

45 y/o Males presents with photosensitivity following sun exposure that has developed over the past 18 months. The patient was erroneously exposed to hydralazine instead of hydroxyzine by the pharmacy for 1 year.

ROS: Neg
Pmhx: Asthma, HSV, atopic derm
Meds: Advair, singulair, levocetirizine, hydroxyzine

Labs: Collagen vascular workup negative
Pt had failed plaquenil and cyclosporine

IM Kenalog 40mg

The patient was subsequently started on xolair, which he also failed. He was recently started on Azathioprine
**Adverse reactions in the skin from anti-hypertensive drugs.**

**Thestrup-Pedersen K**

**Abstract**

Anti-hypertensive drugs, including diuretics and beta-blocking drugs, belong to a group of therapeutics used by about a fourth of the Danish population. As with cytostatics, antibiotics, and topical remedies, they rather frequently cause adverse drug reactions (ADR) in the skin. No exact statistical information is available concerning the extent of such side effects. The information obtained by Danish National Board of Health's Committee on Adverse Drug Reactions shows that 10-60% of ADR from diuretics, beta-blocking agents, and anti-hypertensive drugs are dermatological. The skin symptoms are not unique for any specific drug. But certain symptoms occur more frequently than others. Thiazides can give vasculitis, a phototoxic/allergic eruption, erythema multiforme, or eczema. The combination of amiloride (5 mg) and hydrochlorothiazide (50 mg) carries the highest number of recorded ADR; 59% of these are in the skin. Half of the skin ADR are phototoxic eczema. Furosemide may give eczema, purpura, a bullous eruption, or Steven-Johnson's syndrome in rare cases. Methyldopa can induce eczematous eruptions on hands and feet, a lichenoid eruption, a lupus erythematosus-like eruption, or purpura. Hydralazine may give lupus erythematosus-like eruptions, eczema, or urticaria. Non-specific beta-blocking drugs can induce a morbilliform rash and may aggravate psoriasis. Captopril may induce pruritus in up to 15% of the patients and skin eruptions in 2%. The most serious dermatological side effect, exfoliative dermatitis, is very rarely seen following the use of anti-hypertensive drugs or diuretics.

PMID: 2893692
Patient MB

RESIDENT: DR. LIZA BROWN, PGY- 4
ATTENDING: DR. FRANCISCO KERDEL
Background

33 y/o female presents w/ generalized eruption. Patient was started on Lamictal (Lamotrigine) for bipolar disorder 2 weeks prior. Patient was transferred to LCH from another hospital.
Day 8
Day 16
Day 19
96.8 F, 20 RR, 72 HR, 119/69
AST: 10
ALT: 23
Albumin: 2.8
CXR bibasilar Atelectasis
SCORTEN

- Age >40 years
- Presence of a malignancy (cancer)
- Heart rate >120
- Initial percentage of epidermal detachment >10%
- Serum urea level >10 mmol/L (28 mg/dL)
- Serum glucose level >14 mmol/L (252 mg/dL)
- Serum bicarbonate level <20 mmol/L

**SCORTEN predicted mortality rates**

- SCORTEN 0-1 >3.2%
- SCORTEN 2 >12.1%
- SCORTEN 3 >35.3%
- SCORTEN 4 >58.3%
- SCORTEN 5 or more >90%
## Toxic Epidermal Necrolysis (TEN)

1. Withdrawal of causative agent (anticonvulsants, antibiotics, allopurinol, NSAIDS)
2. IVIG 1g/kg/d x 4d (each infusion over 23h) – NON-SUCROSE CONTAINING IVIG (**IMPORTANT**)  
3. On day fifth after 4d of IVIG, start Albumin 25%, 100cc IV q8h  
4. Pulmonary toilet tid  
5. Tobradex® ½ inch ribbon of ointment on eyes q6h  
6. Artificial tears 1 drop to each eye q2h  
7. Wound bacterial cultures qod  
8. Blood cultures x 2, urine culture, sputum cultures as necessary  
9. Morphine 2-4mg IV q4h or Oxycontin bid prn. May need PCA pump  
10. NGT with 2 Cal® (Glucerna® for diabetics), 30cc/hr for first day then increase to 80cc/hr over next 2 d. Decrease rate depending on residuals  
11. Foley catheter  
12. Avoid central lines  
13. Silver nitrate 0.5% (in sterile water) impregnated Sof Sorb® dressings to all involved areas. Should be impregnated q8h. Change dressings q3d  
14. Air mattress with pressure ulcer prophylaxis (avoid air-fluid bed)  
15. DVT prophylaxis with Heparin 5,000 unit sq bid  
16. GI prophylaxis with Protonix® 40mg IV qd  
17. PRBC transfusions if HCT≤ 25  
18. Platelet transfusions if Plts 10,000  
19. Ventilatory support and hemodialysis as needed  
20. Filgrastim (Neupogen®) 5mcg/Kg sq qd for absolute neutrophil count ≤ 1,000  
21. Antibiotics chosen based on culture results  
22. Heating blanket—watch for evaporative losses  
23. IV fluids: ½ NS + 20 meq KCl to keep urinary output 40-60cc/hr. Better to keep mildly pre-renal- always checking I/O’s to avoid overload: KEEP PATIENT DRY  
24. Replace electrolytes (K, Phos, etc) based on daily analysis  
25. Avoid Silvadene® and sulfa products  
26. Half strength hydrogen peroxide to rinse oral cavity bid (see ORAL CARE)
A Review of the Active Treatments for Toxic Epidermal Necrolysis.

Kinoshita Y¹, Saeki H¹.

Author information

Abstract
Toxic epidermal necrolysis (TEN) is a severe adverse drug reaction associated with the separation of skin and mucous membranes at the dermal-epidermal junction. Although it is rare, many treatments have been trialed because of its high mortality rate. Active interventions performed to date include the use of systemic corticosteroids, intravenous immunoglobulins (IVIg), cyclosporine, plasmapheresis, anti-tumor necrosis factor drugs and N-acetylcysteine, but none has been established as the most effective therapy. IVIg and short-term high-dose corticosteroids were regarded as the most promising treatments for TEN in a comprehensive review of all reported TEN cases from 1975-2003. When used with an appropriate dose and timing, the beneficial effects of IVIg can be maximized. Although no randomized controlled trials have been conducted, cyclosporine and plasmapheresis are considered to be beneficial. As no gold standard for active intervention for TEN has been established, the choice of treatment relies partly on the available guidelines and the experience of the dermatologist. There is still much to be investigated regarding the pathogenesis of TEN, and new findings may contribute to the identification of an effective active intervention strategy.

KEYWORDS: corticosteroids; cyclosporine; intravenous immunoglobulins; toxic epidermal necrolysis; treatment

PMID: 28724844 DOI: 10.1272/jnms.84.110
Patient HT

PAST RESIDENT: DR. JULIE FREDERICKSON
ATTENDING: DR. FRANCISCO KERDEL
63 y/o male with ER(+), HER-2/neu(-) metastatic ductal carcinoma of the breast presented for management of extensive cutaneous metastases.

2008 ductal carcinoma stage III B, 1.2cm tumor
<table>
<thead>
<tr>
<th>PET/CT</th>
<th>11/4/14</th>
<th>2/9/15</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lungs</strong></td>
<td>• Mult right-sided pulm nodules with no FDG uptake: largest 4mm</td>
<td>• Same as 11/4/14 except largest nodule 7mm</td>
<td>Stable</td>
</tr>
<tr>
<td><strong>Spine</strong></td>
<td>• Uptake L2/L3 SUV max 6.02</td>
<td>• L2/L3 SUV max 3.69, improved</td>
<td>Stable/Improving</td>
</tr>
<tr>
<td></td>
<td>• New uptake L posterior 11\textsuperscript{th} rib SUV max 5.44</td>
<td>• L post 11\textsuperscript{th} rib SUV max 5.97</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• New uptake at T4 SUV max 3.88</td>
<td>• T4 SUV max 4.54</td>
<td></td>
</tr>
<tr>
<td><strong>Skin</strong></td>
<td>• New uptake SUV max 3.26 corresponding to nodular skin thickening of left chest wall</td>
<td>• Chest wall nodular skin thickening 3.4cm nodule SUV max 6.32</td>
<td>Progression</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Anterior pelvic wall skin thickening SUV max 3.74</td>
<td></td>
</tr>
</tbody>
</table>
PATHOLOGY

10/13/14, UPPER ABDOMINAL SKIN:
METASTATIC POORLY DIFFERENTIATED MUCIN-PRODUCING ADENOCARCINOMA IN RETICULAR DERMIS WITH FOCAL EPIDERMOTROPIC COMPONENT, CK7+, CK20-.

11/4/14, UPPER ABDOMINAL SKIN:
METASTATIC MAMMARY CARCINOMA WITH EXTRACELLULAR MUCIN PRODUCTION. CK7+, CK20-, PAS+ IN EXTRACELLULAR MUCIN
Chemotherapy with low-dose capecitabine as palliative treatment in a patient with metastatic breast cancer: a case report

Takashi Kawaguchi*, Satoru Iwase, Hironori Takeuchi, Ayako Ikeda, Yuijiro Kuroda, Naoko Sakata, Megumi Umeda, Kaori Kobara, Tadaharu Matsunaga, Sakae Unezaki, and Yoshinori Nagumo

Address: 1Department of Practical Pharmacy, School of Pharmacy, Tokyo University of Pharmacy & Life Sciences, 1432-1 Horinouchi, Hachioji- city, Tokyo, Japan, 2Department of Palliative Medicine, The University of Tokyo Hospital, 7-3-1 Hongo, Bunkyo-ku, Tokyo, Japan, 3Nagumo Clinic, 1-11-2 Ohashi, Shinagawa-ku, Tokyo, Japan, and 4Department of Breast Diseases, Tokyo Medical University Hachioji Medical Center, 1162
Electrochemotherapy of cutaneous metastasis from breast cancer in elderly patients: a preliminary report

Raffaella Benevento, Antonio Santoriello, Giuseppe Perna, Silvestro Canonico

From XXV National Congress of the Italian Society of Geriatric Surgery
Padova, Italy. 10-11 May 2012

Abstract

Background: The management of cutaneous metastases often represents a challenge because they may be widespread and may recur after radiotherapy or chemotherapy; breast cancer accounts for 51% of the total cases of cutaneous metastases. When surgical excision of chest wall recurrences is not possible and other local treatments such as radiotherapy or radiotherapy with hyperthermia fail, topical chemotherapy and electrochemotherapy (ECT) might be taken into account. ECT is a new local treatment of solid tumors which can be defined as the local potentiation, by means of permeabilizing electric pulses, of the antitumor activity of a non permeating anticancer drug with high intrinsic cytotoxicity.
Case Section: 2
Franz Kerdel D.O.
Patient MA

RESIDENT: DR. HOWARD, PGY-3
ATTENDING: DR. KERDEL
57 y/o Hispanic female presented to the office with biopsy proven PV for approximately 1 year duration. She has been placed on a short, tapered course of oral prednisone and topical clobetasol 0.05% cream.
Meds: Prednisone 20mg daily, Clobetasol cream BID
DIAGNOSIS:

A. SKIN BIOPSY, RIGHT UPPER ARM -
   CONSISTENT WITH PEMPHIGUS VULGARIS (SEE NOTE).
   Note: There is a mostly suprabasilar intraepidermal acantholytic blister. PAS stain was negative for microorganisms. Clinical and immunofluorescence (see report) correlation is recommended. Multiple original and deeper step sections were examined.

B. SKIN BIOPSY, RIGHT SHOULDER -
   CONSISTENT WITH PEMPHIGUS VULGARIS (SEE NOTE).
   Note: There is a mostly suprabasilar intraepidermal acantholytic blister. PAS stain was negative for microorganisms. Clinical and immunofluorescence (see report) correlation is recommended. Multiple original and deeper step sections were examined.

C. SKIN BIOPSY, RIGHT LATERAL BREAST -
   CONSISTENT WITH PEMPHIGUS VULGARIS (SEE NOTE).
   Note: There is a mostly suprabasilar intraepidermal acantholytic blister along with acanthosis, eosinophilic spongiosis and intraepidermal eosinophilic abscess formation. These features are consistent with pemphigus vulgaris/vegetans. PAS stain was negative for microorganisms. Clinical and immunofluorescence (see report) correlation is recommended. Multiple original and deeper step sections were examined.
D. DIRECT IMMUNOFLUORESCENCE, RIGHT POSTERIOR SHOULDER - POSITIVE FOR PEMPHIGUS (SEE NOTE).
Note: There is linear/granular IgG deposition throughout the epithelial cell surfaces. There are also linear/granular C3 deposits on the lower two-thirds of the epithelial strata. There are no immunoreactants at the basement membrane zone and no IgA, IgM, C5b-9 or fibrinogen deposits seen in this specimen. These immunofindings are diagnostic for pemphigus, and this immunofluorescence pattern strongly supports the diagnosis of pemphigus vulgaris over other variants. Clinical, histologic correlation is recommended as well as indirect immunofluorescence evaluation (serum) for the exclusion of paraneoplastic pemphigus using murine bladder, monkey esophagus and salt-split skin as substrates. We would be delighted to send an indirect immunofluorescence kit upon request.
TREATMENT

- Prednisone 20mg daily
- Clobetasol paste
- Cellcept 1g Bid
Mycophenolate mofetil and enteric-coated mycophenolate sodium in the treatment of pemphigus vulgaris and pemphigus foliaceus.

Douraki S1, Platamone A, Alaimo R, Bongiorno MR.

Abstract
What is known and objective: Pemphigus is a severe, potentially life-threatening autoimmune blistering disease. The use of corticosteroids has dramatically improved the prognosis and changed its course. However, current morbidity of pemphigus is largely iatrogenic, caused by side effects of the long-term, high-dose corticosteroid therapy that is necessary to sustain disease control. In order to minimize side effects, a range of corticosteroid-sparing immunosuppressive agents have been introduced, including mycophenolate mofetil (MMF) and enteric-coated mycophenolate sodium (EC-MPS). A systematic review was performed to evaluate the effectiveness of MMF and EC-MPS in the treatment of pemphigus vulgaris and pemphigus foliaceus.

METHODS: A retrospective literature search was conducted through multiple electronic databases (PubMed, Medline, The Cochrane database of systematic reviews) for reports on the use of mycophenolic acid (MPA) in the treatment of pemphigus vulgaris and pemphigus foliaceus.

RESULTS: Sixteen studies with a total of 239 patients have evaluated the treatment of pemphigus vulgaris and pemphigus foliaceus with MPA. The majority of patients had refractory disease treated with corticosteroids as monotherapy or associated to adjuvant agents.

DISCUSSION: The results of this review suggest that MPA, as MMF or EC-MPS, may be a promising adjuvant or alternative therapy for the treatment of pemphigus vulgaris and pemphigus foliaceus. It appears safe, at least in the medium term and its adverse events seem to be dose dependent.

WHAT IS NEW AND CONCLUSION: The use of mycophenolate is first-line adjuvant therapy in the treatment of pemphigus vulgaris and pemphigus foliaceus.

KEYWORDS: Enteric-coated mycophenolate sodium; mycophenolate mofetil; mycophenolic acid; pemphigus foliaceus; pemphigus vulgaris; therapy
PATIENT MH

RESIDENT: DR. HIN, PGY-3
ATTENDING: DR. KERDEL
HPI

55 y/o male with a PMHx of Crohn’s disease and anal fistulas was referred for evaluation of bilateral inguinal eruption with ulceration and draining sinus tracts. The lesions started 8 months prior and have been worsening.

• PSHx: partial colectomy w/ colostomy
Plan

- **Continue:**
  - Silvadene Topical 1% BID

- **Start:**
  - Humira at Hirdradenitis Suppurativa Dosing.
New Therapeutic Options

Treatment of metastatic cutaneous Crohn disease with certolizumab

Maija Kiuru MD PhD¹, Brendan Camp MD², Katayun Adhami MD³, Vinita Jacob MD⁴, Cynthia Magro MD², Horatio Wildman MD³

Dermatology Online Journal 21 (11): 4

¹Department of Dermatology, University of California Davis, Sacramento, California

²Department of Pathology, ³Dermatology, and ⁴Gastroenterology, Weill Cornell Medical College, New York, New York
Patient DG

RESIDENT: LIZ LEVACY FOLEY, PGY-3
ATTENDING: DR. KERDEL
HPI

19 y/o Male presented with a 10-yr history of widespread plaques. He was previously treated for Atopic Dermatitis with topical Triamcinolone. Over the past few years, he has had worsening of skin lesions with enlarging plaques on his left neck.
Labs & Imaging

- CBC
- CMP
- Lipids
- TSH
- Free T4 and total T4
- Serum ACE level
**PET Scan**

**Impression:**

1. Visualization of hypermetabolic skin abnormalities involving the left lower neck region, as well as the right anterior abdominal wall area, as described above. The findings are consistent with the patient's known lymphoma.
2. There are FDG-avid lymph nodes bilaterally in the neck, as well as bilaterally in the axillae, also consistent with the patient's known lymphoma.
3. *No metabolically active lesions are seen in the liver or spleen.*
4. No FDG-avid lesions are seen in the skeleton.
5. Interval follow-up with PET-CT is recommended to assess for interval treatment response.
HEMATOPATHOLOGY

Single Case Report

An Unusual Case of Mycosis Fungoides Presenting as Sarcoidosis or Granulomatous Mycosis Fungoides

CLAIRE MAINGUENE, M.D.,1 ODILE PICARD, M.D.,2 JOSÉE AUDOUIN, M.D.,1 AGNÈS LE TOURNEAU, M.D.,1 MICHEL JAGUEUX, M.D.,3 AND JACQUES DIEBOLD, M.D.1
Granulomatous Mycosis Fungoides in an Adolescent—A Rare Encounter and Review of the Literature.

Wieser I,2, Wohlmuth C3, Duvic M4.

Author information

Abstract
Granulomatous mycosis fungoides (GMF) is a rare form of mycosis fungoides (MF) characterized by an infiltrate of atypical lymphocytes, histiocytes, and multinucleated giant cells. Clinically, GMF has a slowly progressing course with a worse prognosis than other forms of MF. With its peak incidence being in the fifth to sixth decade, GMF is rare in children and adolescents. Herein we describe a 14-year-old boy with GMF.

PMID: 27595880    DOI: 10.1111/pde.12959
[Indexed for MEDLINE]
Patient MN

RESIDENT: DR. JENSEN, PGY -3
ATTENDING: DR. KERDEL
69 y/o female diagnosed w/ sezary syndrome in 2005

- Treatments over the years
  - Topicals: steroids, emollients
  - Injections: ILK and INF-alpha to tumors
  - XRT spot
  - Surgical excison (including large lymph node)
  - Systemic: photopheresis, bexarotene, interferon-alpha

- Results
  - Good maintenance of disease until late-2016
Case History

- **Sept 2016**
  - Developed large plaques on trunk, head/neck, tumors slowly enlarging, worsening pruritus

- **Oct 2016**
  - Started chemotherapy with pegylated liposomal doxorubicin (doxil)
Case History (cont.)

- Dec 21, 2016
  - First infusion of brentuximab vedotin
  - Tumor lysis syndrome
    - Allopurinol, IVF
- Jan 11, 2017
  - Received second BV infusion
Pre-Treatment

Post 2 cycles
Pre-Treatment

Post 2 cycles
Pre-Treatment

Post 2 cycles
Brentuximab Vedotin Mechanism of Action
Antibody Drug Conjugate

Monomethyl auristatin E (MMAE), microtubule-disrupting agent
Protease-cleavable linker
Anti-CD30 monoclonal antibody

ADC binds to CD30
ADC-CD30 complex is internalized and traffics to lysosome
MMAE is released
MMAE disrupts microtubule network
G2/M cell cycle arrest
Apoptosis
Phase II Investigator-Initiated Study of Brentuximab Vedotin in Mycosis Fungoides and Sézary Syndrome With Variable CD30 Expression Level: A Multi-Institution Collaborative Project


- 30 MF patients, treatment experienced
- CD30 expression variable (including non-det.)
- 21 (70%) objective response
- 7 (23%) had skin improvement >90%
- Most common AE: Peripheral neuropathy in 66%; 86% improvement within 24 months
Results of a Phase II Trial of Brentuximab Vedotin for CD30⁺ Cutaneous T-Cell Lymphoma and Lymphomatoid Papulosis


- 28 MF patients
- 15 (54%) responded, independent of CD 30 expression
- Average response time 12 weeks
- Average duration 32 weeks
Therapeutic Options

Open-label Phase III trial of brentuximab vedotin Versus Physician's Choice (Methotrexate or Bexarotene) in Patients With CD30-Positive Cutaneous T-Cell Lymphoma (ALCANZA study)

Youn Kim, Stanford University, Annual meeting Amer Soc of Hematology, 2016

- 128 MF or primary CALCL patients
- Patients showed CD30+ expression
- Randomly assigned BV vs. MTX or bexarotene
- Response rate measured at average 4 months:
  - 67% with BV
  - 20% with MTX or bexarotene
Patient MZ

PAST RESIDENT: DR. ECKER
ATTENDING: DR. KERDEL
HPI

76 y/o female referred for livedo reticularis and painful subcutaneous nodules on her breasts, abdomen, and upper thighs x 3 months. She also reports of fatigue and muscle weakness. The working diagnosis was erythema nodosum. She was taking prednisone 30mg and 200mg of plaquenil daily. Initially, the prednisone provided modest relief, however weeks later the pain returned.

ROS: unintentional 12lb weight loss
Histopathology
Histopathology
Histopathology
Labs/Imaging

- CBC, CMP WNL
- PT/INR 34.6/2.9
- Reticulocyte count 110,800
- ESR 100, CRP 12.30 (High)
- Hepatitis panel (–)
- Amylase / Lipase WNL
- ANA, pANCA (+)
- RF, ant SM/RNP (–)
- C3/C4 WNL
- Immunofxn – poorly defined area with IgG and lambda
- ABI: WNL

Dx: Intravascular B cell Lymphoma
Patient Update

- PET CT and bone marrow bx – negative
- Patient reported complete resolution of pain and nearly 100% clearance of lesions within DAYS after initial treatment with RCHOP
- After 3 treatments of RCHOP, the painful subcutaneous nodules returned
Patient Update
Patient Update
New Therapeutic Options

- Treatment of choice for all patients with IVLBCL is combination chemotherapy
  - **RCHOP**
  - Rituximab as both initial and salvage therapy
  - Frequently incorporated into combination chemotherapy

- Autologous stem-cell transplantation
- Radiotherapy for cutaneous limited disease
  - All patients with IVLBCL should be considered to have disseminated disease and receive empiric treatment.
RESIDENT: DR. FRANZ KERDEL, PGY-4
ATTENDING: DR. FRANCISCO KERDEL
Patient is a 81 y/o female who presents with a pruritic eruption on her left breast of 2 months duration. Patient was previously seen by another local dermatologist who performed a shave biopsy of the lesion consistent with drug reaction. Patient has a medical history that includes left breast CA. Treatment included lumpectomy with radiation therapy. Last mammogram done within 1 year was negative.
Left Breast

**Lymphangiosarcoma**

- Atypical vascular proliferation showing dilated vascular structures at superficial dermis. Atypical cells intersecting collagen bundles invading dermis, cellular atypia is moderate with prominent nucleoli, occasional mitotic figures, CD31+, D2-40+, p53 faint positive, CD34 reaction is focal
Treatment

- Left breast mastectomy followed by reconstruction and radiation therapy
Outcomes


Abstract

BACKGROUND: Radiation-associated angiosarcoma (RAAS) is a devastating disease occasionally observed in breast cancer patients treated with radiation. Due to its rarity, our knowledge of disease risk factors, epidemiology, treatment, and outcome is extremely limited. Therefore, we sought to identify clinicopathologic factors associated with local and distant recurrence and disease-specific survival (DSS).

METHODS: Radiation-associated angiosarcoma was defined as pathologically confirmed breast or chest wall angiosarcoma arising within a previously irradiated field. A comprehensive search of our institutional tumor registry (1/1/93 through 2/28/11) was used to identify patients (n = 95 females). Patient, original tumor, RAAS treatment, and outcome variables were retrospectively retrieved and assembled into a database.

RESULTS: The median follow-up for all RAAS patients was 10.3 (range, 2.4-31.8) years. The latency period following radiation exposure ranged from 1.4 to 26 (median, 7) years. One-year and 5-year DSS rates were 93.5 and 62.6%, respectively. Reduced risk of local recurrence was observed in patients who received chemotherapy (P = 0.0003). In multivariable analysis, size was found to be an independent predictor of adverse outcome (P = 0.015).

CONCLUSIONS: Our study demonstrates that RAAS exhibits high recurrence rates. It also highlights the need for well-designed, multicenter, clinical trials to inform the true utility of chemotherapy in this disease.

PMID: 23224828   PMCID: PMC5036516   DOI: 10.1245/s10434-012-2755-y
Case Section #3
Danielle Nicolazzo D.O.
Patient E-S

RESIDENT: DR. DANIELLE NICOLAZZO, PGY-4
ATTENDING: DR. FRANCISCO KERDEL
63 y/o male presents for evaluation and treatment of right foot mass. Patient diagnosed with Kaposi Sarcoma and underwent radiation therapy.

PMHx: DM, HTN, HIV negative
Right medial foot:
Kaposi sarcoma with HHV8 stains showing classic nuclear pattern

Right plantar foot:
Kaposi sarcoma
New Therapeutic Options

Current therapies include:

- Alitretinoin 0.1% gel – Panretin gel applied BID
- Cryosurgery
- Radiation therapy (electron beam)
- Intralesional vinblastine (0.1mg)
- Local excision
- Chemotherapy – vinblastine/vincristine regimens, anthracyclines (doxorubicin)
- Cessation of immunosuppressant medications (iatrogenic KS)
- Adherence to HAART therapy (AIDS-associated KS)
Follow Up Photos
Patient CD

PAST RESIDENT: DR. JENNIFER DAVID
ATTENDING: DR. FRANCISCO KERDEL
41 y/o female was referred for recurring outbreaks of multiple papulo-vesicular eruptions involving her face for the past 4 years. The lesions were asymptomatic and not exacerbated by sun exposure. Prior treatments included sunscreen, minocycline, doxycycline, and topical hydrocortisone none of which controlled her outbreaks.
Labs

CMP: wnl
CBC: wnl
Sed Rate: 33 (0-20)
RPR: non-reactive
ANA: negative

Varicella-Zoster IgG Titer: <135
HSV 1 IgG: 24 (0.0-0.6)
HSV 2 IgG: 0.5 (0.0-1.0)
Immunohistochemistry

- Positive: CD3, CD8, CD25, granzyme B, TIA-1, TCR-B, scattered CD20 B-cells
- Negative: CD30, CD56, Varicella zoster, HSV-1 and 2
- EBER: focally positive in the atypical cells
- PCR detected clonal rearrangement of TRG gene
- No HTLV1-viral sequences detected by PCR
Diagnosis

- Adult onset hydroa vacciniforme-like lymphoma with an indolent behavior (most pediatric reported cases have high mortality)
New Therapeutic Option


Thalidomide for the treatment of hydroa vacciniforme-like lymphoma: report of four pediatric cases from Peru.

RESIDENT: DR. DANIELLE NICOLAZZO, PGY-4
ATTENDING: DR. FRANCISCO KERDEL
44yo F presents with a generalized rash present for 6 weeks. She was previously prescribed antibiotics (doxycycline) at an urgent care for an unrelated problem. She now reports desquamation of skin, fever, chills, and decreased appetite.
ANA +
dsDNA +
Scl-70 –
Anticardiolipin –
ss-A/ss-B –
Anti Smith –
RNP –

CMV IgM +
ECHO – EF 60%, no valvular abnormalities
CXR – no acute cardiopulmonary disease
Pathology
Pathology

- POSITIVE DIRECT IMMUNOFLUORESCENCE
  - IgG: Colloid bodies
  - C3: Granular band at dermal epidermal junction.

These changes are consistent with Rowell's syndrome where lesions clinically resemble SJS in the setting of SCLE, ACLE or DLE.
Treatment

- IV Solumedrol with prednisone taper
- Plaquenil 200mg BID
Erythema multiforme and Stevens-Johnson syndrome/toxic epidermal necrolysis associated with lupus erythematosus.

Torchio D¹, Romanelli P, Kerdel FA.

Abstract

BACKGROUND: The occurrence of erythema multiforme (EM)-like lesions in association with lupus erythematosus (LE) is often referred to as "Rowell syndrome" (RS). However, the existence of RS, or at least its nosographic independence from LE, is questioned. The association of Stevens-Johnson syndrome (SJS)/toxic epidermal necrolysis (TEN) with LE is also controversial.

OBJECTIVE: We sought to define the features of EM and SJS/TEN in the setting of LE.

METHODS: The worldwide literature on the topic was systematically collected and reviewed.

RESULTS: A total of 132 citations were found, from which 95 cases of EM-like lesions and 47 of SJS/TEN associated with LE were retrieved. Our analysis identified a subgroup defined as "subacute cutaneous LE (CLE)/acute CLE with EM-like lesions" and highlighted that this and subacute CLE/acute CLE with TEN-like lesions are variants of already known CLE subpatterns. On the other hand, RS can be considered an independent chronic CLE subtype characterized by the distinctive co-occurrence of chronic CLE and EM-like lesions and frequent, albeit mild, systemic involvement.

LIMITATIONS: The study was based on retrospective data and the number of reported cases identified was relatively small.

CONCLUSION: RS might be included as a chronic CLE subtype within the spectrum of LE-specific skin disease.

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Patient LA

RESIDENT: DR. LIZ LEVACY, PGY-3
ATTENDING: DR. FRANCISCO KERDEL
Pt is a 59 y/o presented with bilateral upper extremity erythema x 1 year. The patient stated that she was previously treated with 5-FU without any improvement. Patient also complained of bilateral lower extremity hyperpigmentation. Pt also takes hydroxyurea for polycythemia vera. No new medications.
Labs

- CBC:
  - H/H: 16.1/50.4
  - Plt: 403
- CMP: WNL
- CK: 37
- Aldolase: 5.4
- ANA: Negative
- Anti Jo-1 Ab: Negative
- Mi-2 Ab: Not detected
Other workup

- Pt has had a total hysterectomy
- Past colonoscopy, pap smear, mammogram are up to date and WNL
Hydroxyurea-induced dermatomyositis-like eruption.

Dacey MJ¹, Callen JP.

Hydroxyurea induced dermatomyositis-like eruption.

Zappala TM¹, Rodins K, Muir J.

Abstract

Medication-induced dermatomyositis (DM) is rare, but a recent review highlighted hydroxyurea (HU) as the most common inciting agent. To aid diagnosis, HU-induced DM-like eruption (HU DM-LE) forms a distinct dermatopathy where the typical cutaneous features of DM are without systemic involvement and co-exist with other HU-induced cutaneous findings such as severe xerosis, atrophy, stomatitis, cutaneous and mucosal ulceration and melanonychia. On cessation of HU the DM-LE clears avoiding unnecessary immunosuppression and demonstrating the importance of consideration of medication aetiology in DM presentations. We present a case report and review of the literature.
Patient JG

RESIDENT: DR. GHERGHINA, PGY-3
ATTENDING: DR. KERDEL
HPI

71yo M hx metastatic melanoma of scalp presents with itching and burning of thighs, pelvis, abdomen, and extremities. He is currently finishing a prednisone taper and was started on Ipilimumab 2 weeks prior.
Treatment

- Dapsone 100mg daily
- Clobetasol 0.05% crm BID
- Doxepin 25mg qHS
- IM 40mg/ml x1ml in gluteus
Vancomycin-associated linear IgA disease mimicking toxic epidermal necrolysis

Amanda Regio Pereira,¹ Luis Henrique Barbizan de Moura,¹ Jhonatan Rafael Siqueira Pinheiro,¹ Victor Pavan Pasin,¹ Milvia Maria Simões e Silva Enokihara,¹ and Adriana Maria Porro¹

Abstract

Linear IgA dermatosis is a rare subepidermal autoimmune blistering disease characterized by linear deposition of IgA along the basement membrane zone. In the last three decades, many different drugs have been associated with the drug-induced form of the disease, especially vancomycin. We report a case of vancomycin-induced linear IgA disease mimicking toxic epidermal necrolysis. The aim of this work is to emphasize the need to include this differential diagnosis in cases of epidermal detachment and to review the literature on the subject and this specific clinical presentation.

Keywords: Linear IgA bullous dermatosis, Drug eruptions, Vancomycin
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RESIDENT: GABRIELA PERDOMO, PA-S
ATTENDING: DR. KERDEL
HPI

54 y/o female presents with a pruritic erythematous eruption along the nasolabial folds for the past 2 years. Patient admits to getting fillers 20 years ago. She has been getting treatment with intralesion kenalog by a plastic surgeon.
Treatment

- Intralesimal Kenalog 20mg/cc 1cc total
- Considered Plaquinil
- Other possibilities discussed included systemic steroids and methotrexate
[Sarcoidal granulomas following injections of botulic toxin A (Botox) for corrections of wrinkles].

[Article in French]
Ahibib S¹, Lachapelle JM, Marot L.

Author information

Abstract

BACKGROUND: The introduction of foreign material into the skin can lead to sarcoidal reactions. Such a reaction is reported, consecutive to injections of botulic toxin A (Botox).

CASE REPORT: A 57-year-old woman, noticed the occurrence of frontal and glabellar nodules, 3 weeks after the injection of botulic toxin A (Botox), for the correction of wrinkles. Histopathological examination revealed a sarcoidal granuloma. Clinical and biological investigations were negative, ruling out the hypothesis of systemic sarcoidosis. The lesion could be reproduced experimentally by an intradermal injection of botulic toxin A on the volar aspect of the forearm. Corticosteroids per os associated with intralesional injections of triamcinolone acetonide were followed by a complete regression of the nodules.

DISCUSSION: The occurrence of sarcoidal granulomas at the sites of injection of botulic toxin A (Botox(R)) has not been reported - so far - in the literature. Systemic sarcoidosis has been ruled out. The sarcoidal reaction has been reproduced experimentally by the intradermal injection of botulic toxin A, but not by saline. This leads to think that the sarcoidal reaction was provoked by antigenic stimulation, comparable to the Kveim reaction, and did not correspond to "scar sarcoidosis".

PMID: 16495851
Case Section # 4
Nick Poulos D.O.
Calciphylaxis: An Update

NICK POULOS DO, PGY-4
LARKIN COMMUNITY HOSPITAL
Calciphylaxis

Also known as,

- Uremic gangrene
- Calcific uremic arteriolopathy
- Calcifying panniculitis
Calciphylaxis

Or, is it?

Historically, a vascular calcifying disorder associated with renal disease.

The pathogenesis still is unclear.

Our understanding is changing.
Calcification Disorders

Metastatic Calcification

Dystrophic Calcification

Idiopathic Calcification

Iatrogenic Calcification

Renal Disease

Benign Nodular Calcification

Calciphylaxis
1961: Rats sensitized with vitamin-D derivative, “challenged with ferric dextran plus certain histamine liberators” causes fatal form of musculocutaneous inflammation. “Calciphylaxis is a condition of hypersensitivity in which, during a "critical period" after sensitization by a systemic calcifying factor (e.g. vitamin-D compounds, parathyroid hormone, sodium sulfathiazol), treatment with certain challengers (e.g. metallic salts, Fe-Dex, egg white) causes an acute, local calcification followed by inflammation and sclerosis”
Calciphylaxis: The Literature

1983: Lever - Metastatic calcification is characterized by the deposition of calcium salts within normal soft tissues

1987: “Calciphylaxis is now a well-described syndrome in patients with chronic renal failure and secondary hyperparathyroidism.”

1990s: “Uremic Gangrene Syndrome” - treatment: parathyroidectomy

2001: Calciphylaxis name change? Commentary in the Lancet

2002: Calciphylaxis is “dystrophic” calcification of injured vessels from thrombosis?

2003: Case report calciphylaxis without renal disease secondary to alcoholic liver disease.

2009: Case report calciphylaxis without renal disease secondary to endometrial Ca.

2014: Case report non uremic calciphylaxis without renal disease secondary to DM, Tobacco and Fe deficiency
Calciphylaxis: The Literature


2017: Hypercoagulability as a risk factor for calciphylaxis (Lupus anticoagulant and Protein C, more than two abnormal coag tests)
Calciphylaxis Literature Summary

- +/- ESRD on HD
- Hypercoagulable states (Lupus anticoagulant, protein C, prothrombotic)
- Pathogenesis remains elusive.
Diagnosis

- Gold standard - Tissue biopsy with calcification in vessels
- Not all cases of calciphylaxis show positive biopsy initially\(^4\)
- Laboratory studies not helpful\(^{14}\)
- Bone scintigraphy has been shown to be useful\(^4\)
Diagnosis - Clinical

Skin Ulcers with painful purpura at the periphery

Calcification and thrombosis in subcutis blood vessel

Diagnosis - Bone Scintigraphy

Abnormal calcium deposition in soft tissue (arrows)

Treatment

1. Calcium, phosphorus, PTH homeostasis (calcimimetics, phosphate binders, etc.)
2. Parathyroidectomy
3. Low-calcium dialysate solutions
Treatment

1. Change warfarin to heparin or NOACs
2. Hyperbaric oxygen
3. Sodium thiosulfate IV, intralesional
4. tPA
5. No clinical trials or disease-specific drugs
Prognosis

- Depends on clinical presentation
- If classical calciphylaxis, high mortality.
- In nonuremic calciphylaxis, low mortality with good response to treatment
References - Retrospective studies / Reviews

References - Case reports


References - Case reports


