RCPA Small Biopsy Course March 2019
Dermatopathology
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CASE 1

- 79 year old female
- 2 weeks of painful red plaques left leg
- Recent diagnosis of Non Hodgkin’s lymphoma
Cutaneous Polyarteritis Nodosa
Vasculitis with necrotic endothelial cells (Elston’s Big 5)

- Polyarteritis nodosa
- Wegener’s granulomatosis (Granulomatosis with polyangiitis)
- Churg Strauss syndrome (Eosinophilic granulomatosis with polyangiitis)
- Rheumatoid arteritis
- Septic vasculitis
The other Differential Diagnoses in this case

• Erythema induratum/Nodular vasculitis
• Superficial thrombophlebitis
CASE 2

- 61 year old female
- Flat topped violaceous papules with some coalescence involving wrists, arms, buttocks and thighs
Fibrinogen
Lichen Planus
Lichen planus versus lichenoid drug - clues to a drug aetiology

- Eosinophils *
- High ascending apoptotic keratinocytes
- Focal basal vacuolar lichenoid reaction
- Parakeratotic scale
- Areas of non thickened stratum granulosum
- Less banded superficial dermal inflammatory reaction

- Deep dermal inflammation
- Plasma cells and immunoblasts
- Purpura
- Fibroblasts with reactive atypia
- Spongiotic component
- Prominent endothelial cell swelling
- Frequent melanophages
The solitary lichenoid lesion – Think of:

- Lichenoid (lichen planus like) keratosis
- Porokeratosis
- Fixed drug eruption
- Regressing melanocytic tumour
- Regressing verucca, solar keratosis, seborrhoiec keratosis
CASE 3

- 50 year old male
- Morbilliform eruption on trunk and palmar hands
Secondary Syphilis
Secondary syphilis: the great imitator reaction patterns. Often mixed.

- Lichenoid *
- Psoriasiform *
- Spongiosic
- Granulomatous
- Pustular
- Alopecia
- Condylomata lata
- Lues maligna (thrombotic endarteritis obliterans)
8(10) L’s and DRUGS for Superficial and Deep Dermal Infiltrates With Lymphocytes

- Lymphoid/lymphoma
- Lues (Syphilis)
- Lepidoptera (Bites)
- Lupus erythematosus
- Lichen striatus
- Light eruptions
- Lipoidica (necrobiosis)
- Leprosy
- Lyme (Borreliosis) *
- Low temperature* (Perniosis)

- Drugs/Dermatophyte
- Reticular erythematous mucinosis
- Urticaria
- Gyrate erythema
- Scleroderma/Morpheoa
What about Lichenoid and Deep Dermal Infiltrates?

- Secondary Syphilis
- Cutaneous Lupus Erythematosus
- Herpes Virus Infection
- Photolichenoid Dermatitis
- Drug Reaction
- PLEVA
- Perniosis
- Lichen striatus
- Borreliosis
Wedge Shaped Infiltrates

- Pityriasis lichenoides et varioliformis acuta (PLEVA)
- Bites
- Lymphomatoid papulosis (CD30+LPD)
<table>
<thead>
<tr>
<th>Inflammatory Diseases with Plasma Cells</th>
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<tbody>
<tr>
<td>• Syphilis (absent in a third and may be eosinophil rich)</td>
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<td>• Kaposi’s sarcoma *</td>
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<tr>
<td>• Chronic pustular folliculitis</td>
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<tr>
<td>• Leishmania</td>
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<td>• Lupus erythematosus</td>
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<tr>
<td>• Rhinoscleroma</td>
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<tr>
<td>• Zoons balanitis/vulvitis and plasma cell cheilitis</td>
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<td>• Necrobiosis lipoidica</td>
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<tr>
<td>• Morphoea</td>
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<td>• IgG4 related sclerosing disease</td>
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<td>• Rosai Dorfman disease</td>
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<tr>
<td>• Idiopathic lymphoplasmacytic plaque of children</td>
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<tr>
<td>• Rosacea</td>
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<td>• Granuloma inguinale, yaws and chancroid</td>
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<td>• Nodular amyloidosis *</td>
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Body Sites With Frequent Plasma Cells

- Face
- Scalp
- Mucosa
- Back of neck
- Axilla
- Breast
- Anogenital region
- Shins
CASE 4

• 35 year old male
• Enlarging plaque on shoulder
Cutaneous Leishmaniasis
Diseases with parasitized macrophages

- Leishmaniasis
- Granuloma inguinale
- Histoplasmosis
- Leprosy
- Tuberculosis
- Atypical mycobacteria
- Penicilliosis
- Rhinoscleroma
- Emmonsia pasteuriana
- Malakoplakia
CASE 5

• 61 year old female
• Widespread discoid plaques on body
Psoriasis
Psoriasis Subtypes

- Plaque
- Guttate
- Pustular
- Palmoplantar pustulosis
- Spongiotic
- Verrucous
- Erythrodermic

- Inverse
- Acrodermatitis continua of Hallopeau
- Scalp
- Sebo-psoriasis
- Nail
- Reiter’s disease