Unit IX – Problem 4 – Clinical: Discoid Lupus Erythematous (DLE)

- DLE:

- It is a benign variant/ subtype of the chronic cutaneous lupus eythematous (chronic CLE) constituting 50%-85% of cases with CLE.
- The only manifestation which can be noticed in patients with this subtype is chronic, progressive, painless and non-itchy skin lesions.

- How would you describe the skin lesions in DLE?

- They are very disfiguring lesions:
 - ✓ Sharply demarcated, cone-like (مخروطي الشكل), erythematous (مُحمَر), scaly (مُتَقَشِّر) plagues.
 - ✓ Telangiectasia (spider veins).
 - ✓ Hypo-pigmented center.
 - ✓ Central scarring.
 - ✓ Atrophic center.
- These skin lesions start in the face and may spread to the chin, forehead and scalp leading to patches of scarred and hyperpigmented areas of permanent baldness



- Differential diagnosis for these skin lesions (show in the images above):
 - ✓ SLE.
 - ✓ Squamous cell carcinoma
 - ✓ Plaque psoriasis (الصدفية).
 - ✓ Syphilis.

- Mechanism of DLE:

• Stress/ UV-light exposures induce heat-shock protein in keratinocytes which are targeted by gamma delta T cell-mediated epidermal cell cytotoxicity.

- Diagnosis of DLE:

- **Skin biopsy**: histopathology will show the following characteristics:
 - ✓ Lymphocytic dermal infiltration.
 - ✓ Strongly positive IgM, IgG, IgA and C3 (in immunofluorescence).
 - ✓ Dermal deposition of mucin.
 - ✓ Hyperkeratosis.
 - ✓ Vascular degeneration.
 - ✓ Epidermal atrophy.
- **Serology** (looking for antinuclear antibodies ANA).

- Treatment of DLE:

- Avoidance of exposure to sunlight (use of sunscreens, hats and protective clothes).
- Topical steroids.
- Intra-lesional injection of triamcinolone acetonide for scalp lesions.
- Hydroxychloroquine (antimalarial drug).
- Advice the patient to stop smoking.
- Explain possibility of systemic involvement (consultation).

Prognosis:

• \leq 5% progress to SLE with time.



- There are disfiguring lesions with scar (scaring alopecia which is permanent) and atrophy.
- Squamous/ basal cell carcinoma could be a late complication.

- Drug-induced SLE:

- It is a syndrome of positive antinuclear antibody (ANA) in the serum of the patient.
- It occurs more in whites and less in females (when compared with patients having SLE).
- Associated symptoms:
 - ✓ Fever and malaise.
 - ✓ Arthalgias/myalgias.
 - ✓ Serositis (pleuritis and pericarditis).

Note: it rarely involves skin, kidneys or brain.

• Drugs which can induce SLE:

✓ <u>Antiarrhythmic</u>: procainamide ✓ Antihypertensive: hydralazine

✓ Antimalarial: Quinidine (Quiniglute®)
✓ Antibiotics: ionized, minocycline,
✓ Antithyroid: propylthiouracil

✓ Antipsychotics: chlorpromazine and lithium
 ✓ Anticonvulsants: carbamazepine and phenytoin
 ✓ Antirheumatic: sulfasalazine & salazopyrine

✓ <u>Diuretic</u>: hydrochlorothiazide

✓ <u>Antihyperlipidemics</u>: lovastatin and simvastatin

✓ The biological DMARD: Interferons and TNF inhibitors

Only memorize the following four drugs which are mentioned in the tutor guide: penicillin, hydralazine, contraceptive pills and sulfonamides.

- ANA usually appears before symptoms.
- On withdrawal of the suspected agent, the condition usually resolves over several weeks after discontinuation of the offending medication.

