Part 1. Four pictures for each individual category (12 groups).

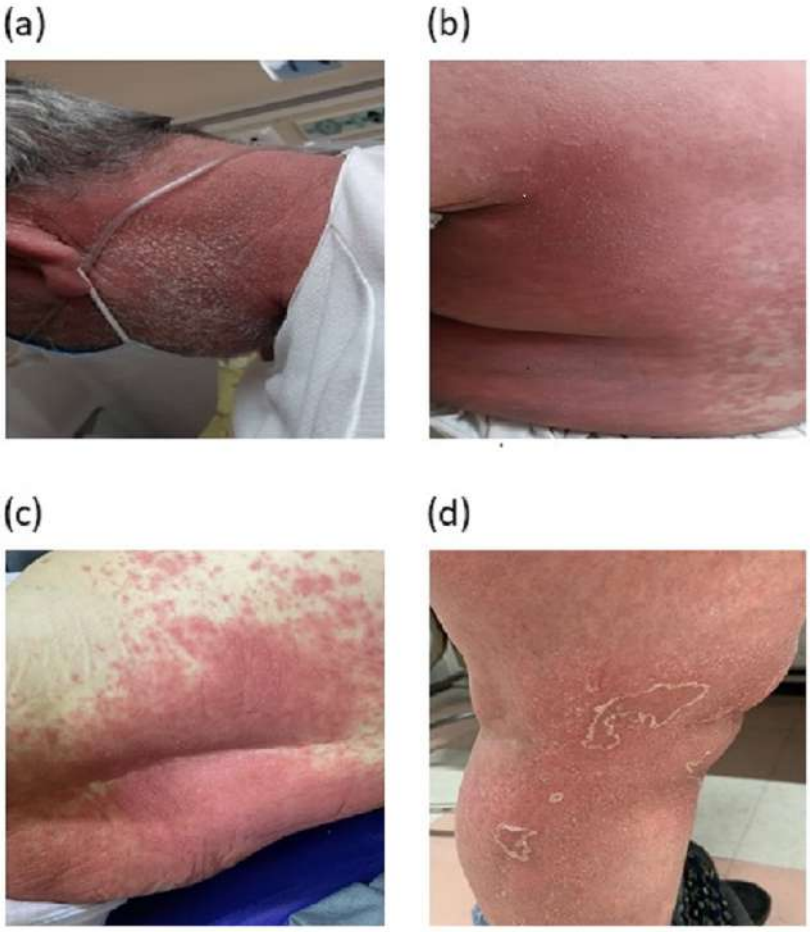

Figure 1. Generalized pustular eruptions: (a) pustular eruptions with underlying erythema, (b)eryrhematous plaques with pustules, (c)erythematous plaques with peripheral pustules, (d) annular scaling with erythema and fine pustules.

Figure 2. Erythroderma: (a) erythroderma with psoriasiform scaling in a patient with a previous history of psoriasis; biopsy was infavor of psoriasis, (b) erythroderma with psoriasiformscaling, the same patient, (c) erythroderma with fine scaling, another patient with a history of psoriasis, (d) PRP-like reactions with progression to erythroderma.

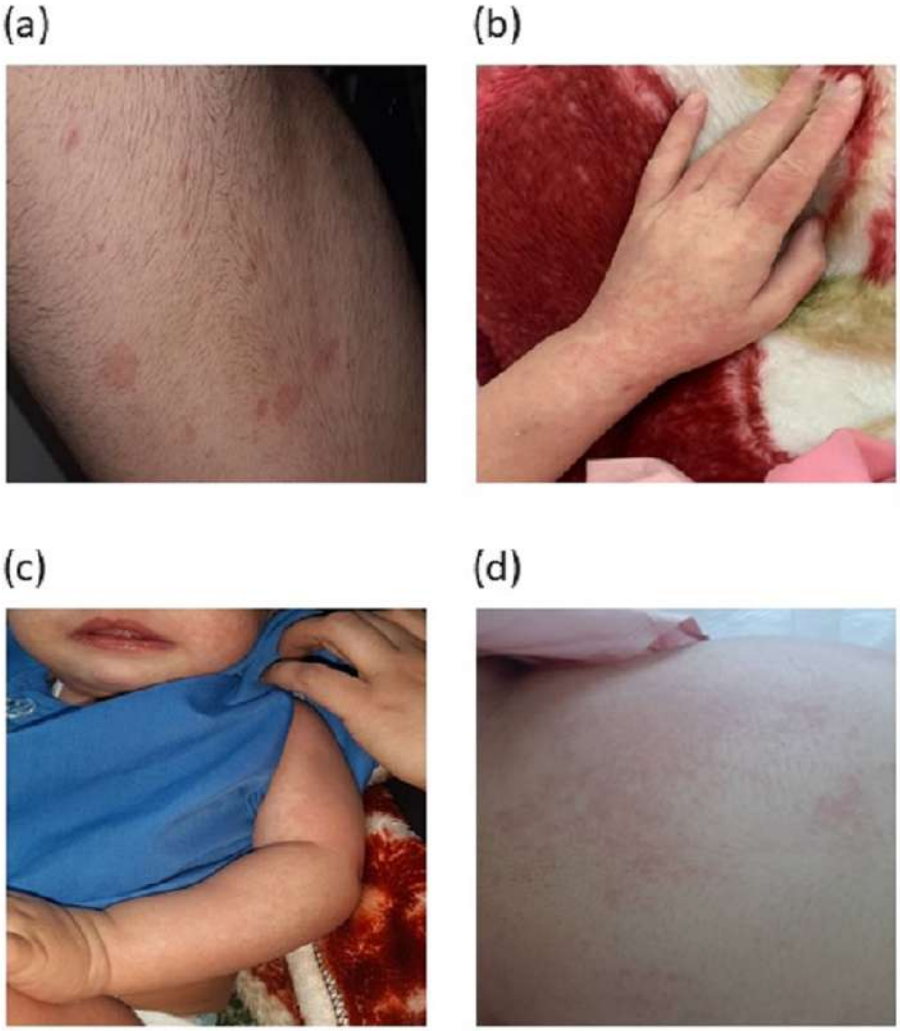

Figure 3. Maculopapular lesions: (a) erythematous PR-like papuloplaques on the trunk, (b) maculopapular rashes on the extremities and the body of a COVID-19 patient with a history of mucormycosis during hospitalization, the rasheswereprobably drug-induced, (c) generalized maculopapular rashes in a child, (d) generalized maculopapular rashes in a pregnant woman.

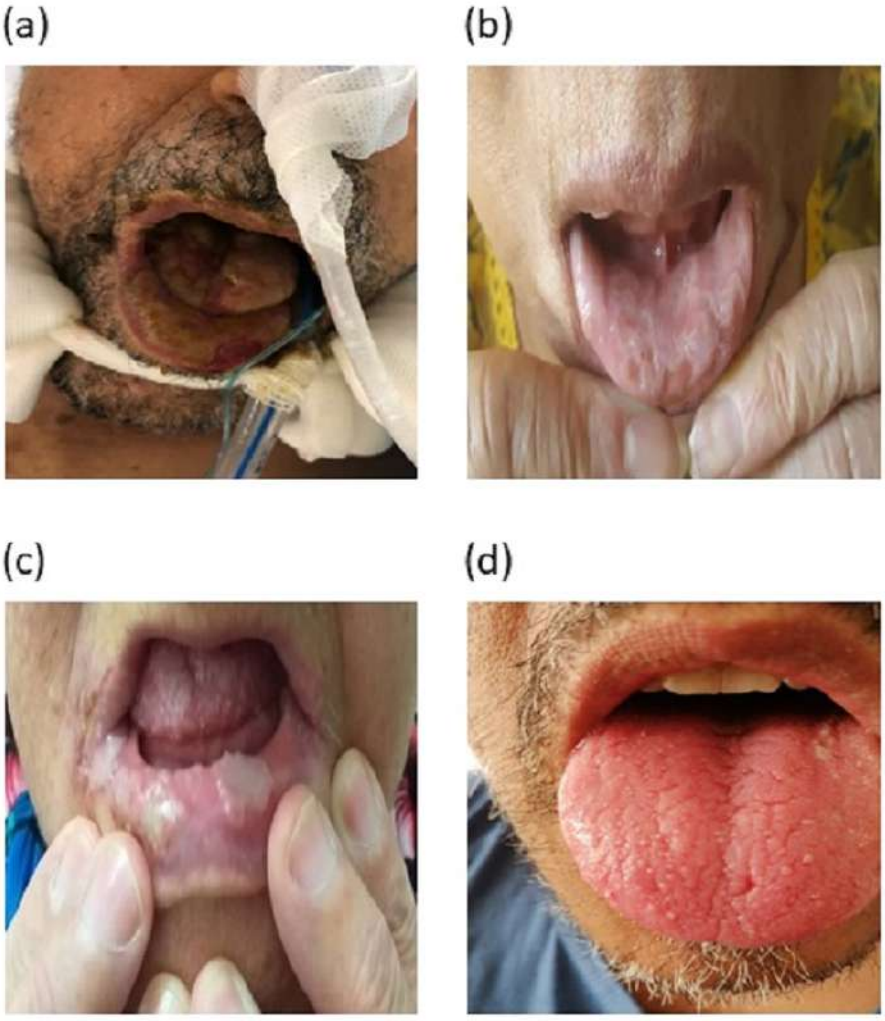

Figure 4. Mucosal lesions: (a) erosive lesions on the lips and tongue with a yellowish membrane, (b) erosions with circinate borders on the lower lip, (c) irregular vesiculobullous lesions on the lower lip, (d) prominent lingual villi (a strawberry tongue-like pattern).

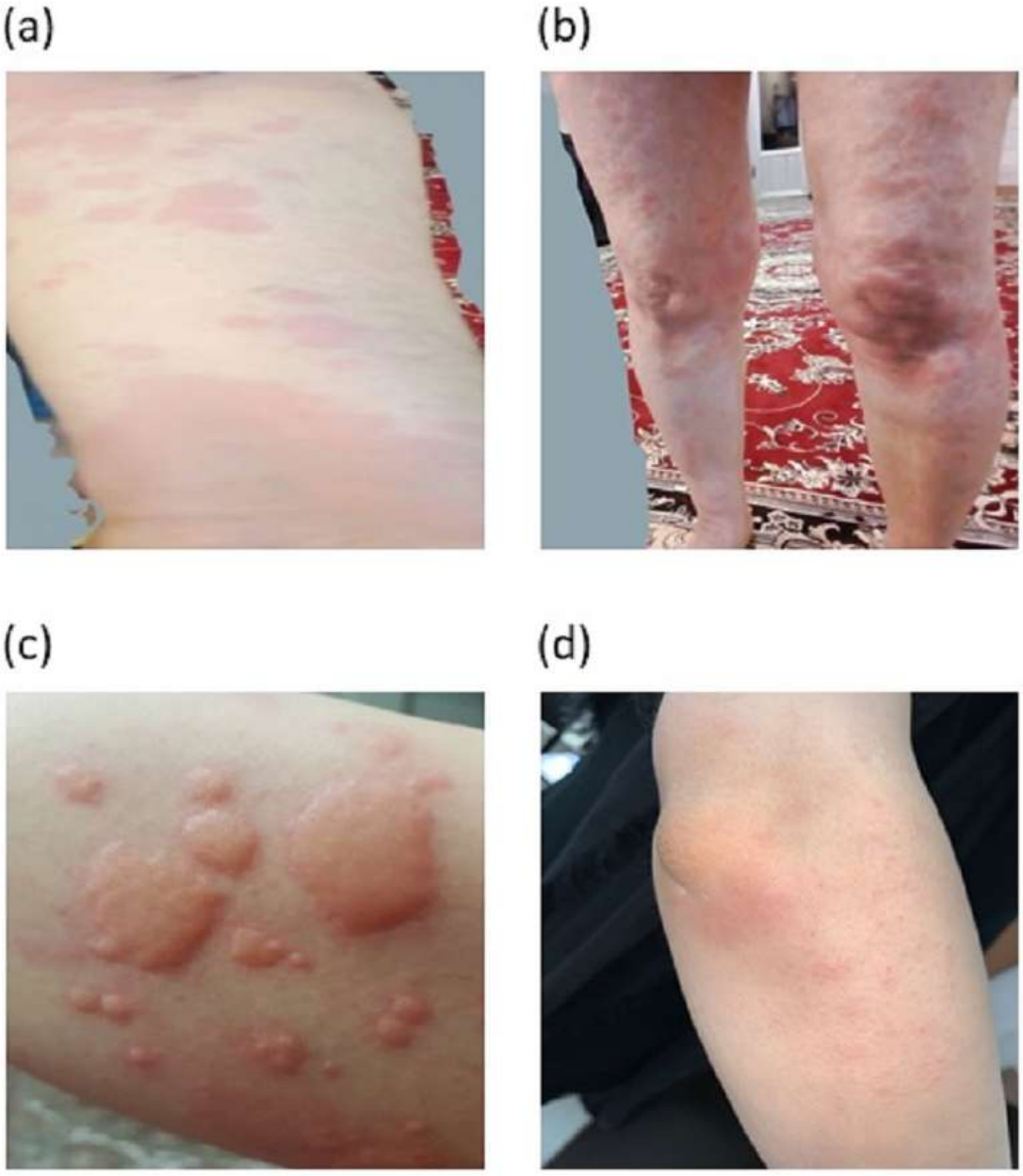

Figure 5. Urticarial lesions: (a) urticarial lesions on the upper extremities, (b) urticarial lesions on the lower extremities, (c) post COVID-19 generalized urticarial lesions, (d) Urticarial rashes as a presenting sign for COVID-19.

Figure 6. Vascular injuries: (a) acral cyanosis, (b) chilblain-like acral lesions, (c) ecchymotic lesions with bulla, (d) acralecchymotic lesions.

Figure 7. Vesiculobullous lesions: (a) generalized BP-like bullae, (b) vesiculobullous lesions with an EM- like pattern, (c) SJS/TEN with skin detachment, (d) erythematous and edematous plaques with superimposed bullae on the chest.

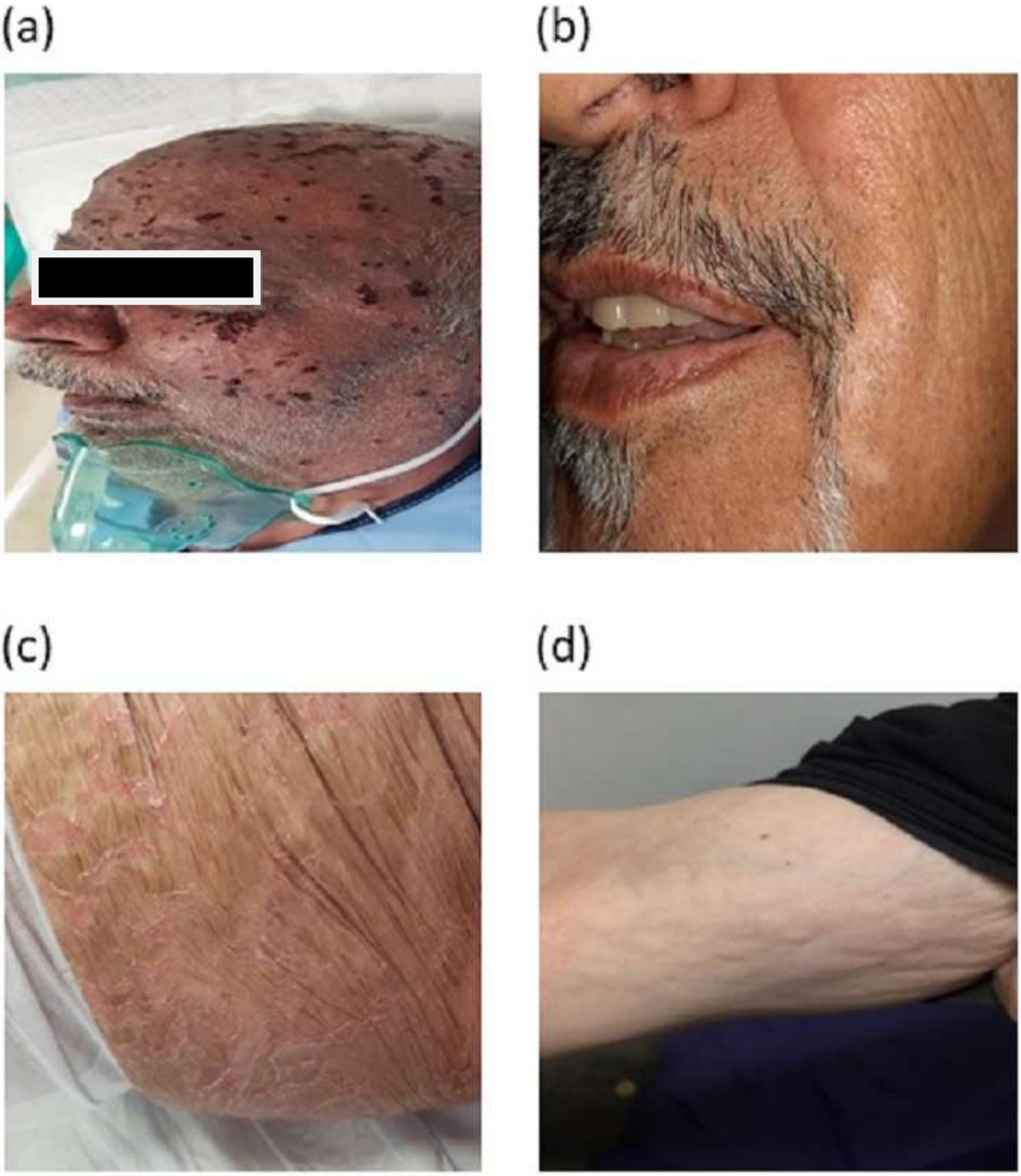

Figure 8. specific new onset of dermatoses or aggravated ones: (a) vesicular lesions in a patient with a history of pemphigus vulgaris, (b) new formation of depigmented patches in a patient with a previous history of vitiligo, (c) asteatotic eczema on the xerotic skin, (d) sclerodermoid reactions without a history of rheumatologic disorders.

Figure 9. Nail changes: (a) Onychomadesis, (b) Beau's lines, (c) Onycholysis, (d) Onycholysis and onychomadesis.

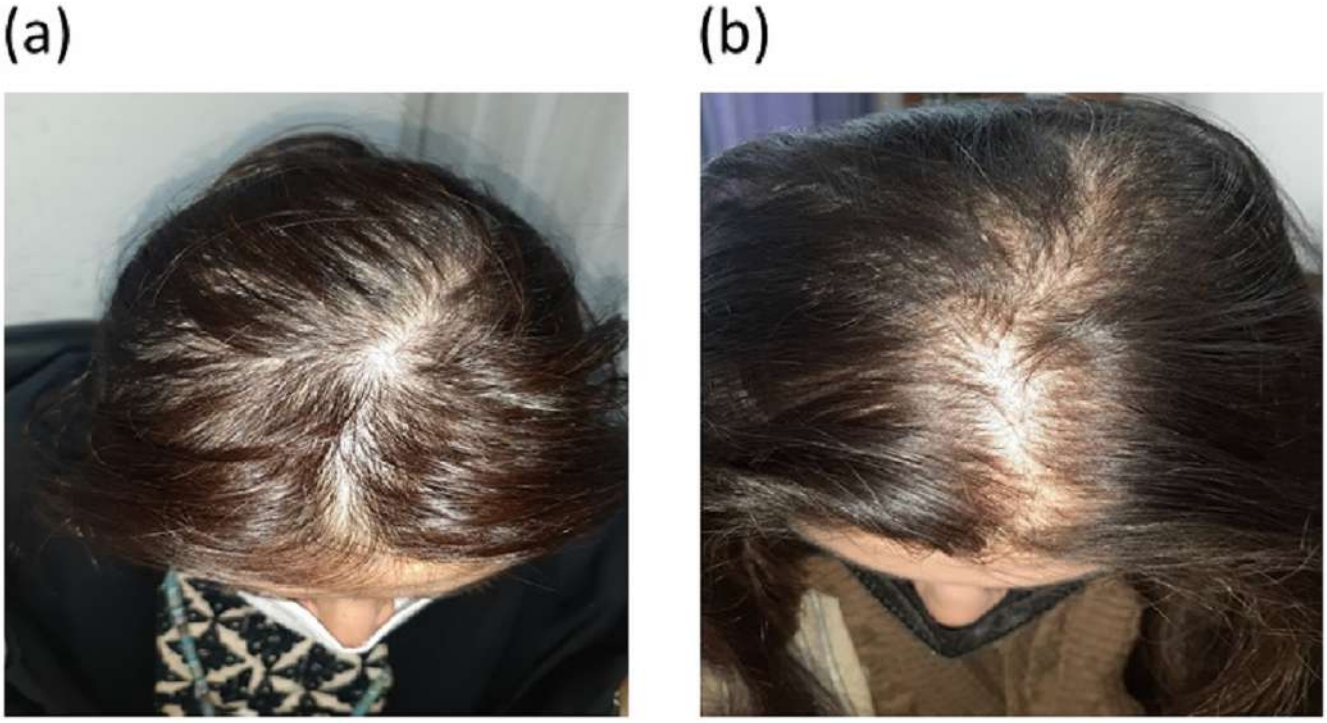

Figure 10. Hair loss: (a) sever telogen effluvium, 3 months after COVID-19, (b) sever telogen effluvium, 8 weeks after COVID-19.

Figure 11. Non-specific lesions: (a) thorasic zoster, (b) unilateral zosteriform lesions on the hard palate, (c) dermatophytosis, (d) steroid-induced acne.

Figure 12. Post COVID-19 vaccine mucocutaneous reactions: (a) erythema multiformis, (b) pityriasisrosea, (c) herald lesions of PR, (d) generalized pruritus and erythema.

Part 2. More pictures of all categories.

1 - Generalized papulopustular eruptions

Figure 13-1. Generalized erythema with superimposed pustules and a dusky red appearance in some area in a 61-year-old man with a past history of diabetes mellitus, hypertension and urticarial; the rash was presented after prescription of hydroxychloroquine for COVID-19. (AGEP).

Figure 1-1. cont': After treatment with prednisolone 40 mg/daily, topical steroid and discontinuing of hydroxychloroquine.

Figure 1-2. Acute generalized exanthematouspustulosis (AGEP).

[redacted]

Figure 1-3. Erythematous rash in a young woman 3 weeks after COVID-19 infection and antibiotic therapy with fine pustules and progression to exfoliation that was dominant on the periphery of the lesions. (pustular psoriasis/AGEP).

2 - Erythroderma


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Figure 2-1. Erythroderma with silvery scales all over the body except the face; an old woman with past history of psoriasis that was hospitalized due to cirrhosis, probably in the field of the prolonged usage of methotrexate, and was consulted with dermatology departement for erythroderma. In the evaluation for cause of progression of her psoriasis disease to erythroderma, COVID-19 PCR test was reported positive.

Figure 2-2. Ggeneralized erythema and scaling one month after COVID-19 infection in an elderly man with a history of psoriasis treated with adalimumab that following COVID-19 infection, adalimumab was discontinued, and hydroxychloroquine was started for him. Abrupt discontinuation of adalimumab, hydroxychloroquine intake, and COVID-19 disease can be exacerbated causes of psoriasis in this patient.




Figure 2-3. A 45-year-old man was presented with pityriasisrubra pilaris (PRP)-like pattern that progressed to erythroderma within several weeks after COVID-19. In skin biopsy, hyperkeratosis with mild parakeratosis and normal granular layer, mild vacuolar degeneration of basal layer, mixed perivascular infiltration of lymphocytes, eosinophils, and neutrophils were reported that was in favor of drug-induced or post COVID-19 viral reactions (viral exanthema). In lab data, WBC 6900 with 11.7% eosinophils was reported.

Figure 2-4. A 35-year-old man with PRP-like lesions 1 month after COVID-19 infection and progression to erythroderma during 4 months.

3 - Maculopapular lesions:

Figure 3-1. PR.

Figure 3-2. PR-like lesions during COVID-19 infection.

Figure 3-3. PR.

Figure 3-4. PR-like lesions 3 weeks after COVID-19 infection.

Figure 3-5. PR lesions 2 weeks after COVID-19.

Figure 3-6. PR-like lesions 5 months after COVID-19 in a 10-year-old boy.

Figure 3-7. PR-like and urticarial lesions.

Figure 3-8. PR in a young woman 2 months after COVID-19.

Figure 3-9. PR lesions 2 weeks after COVID-19.

Figure 3-10. Generalized erythematosus rash with pruritus. Biopsy of the skin was in favor of viral exanthema.

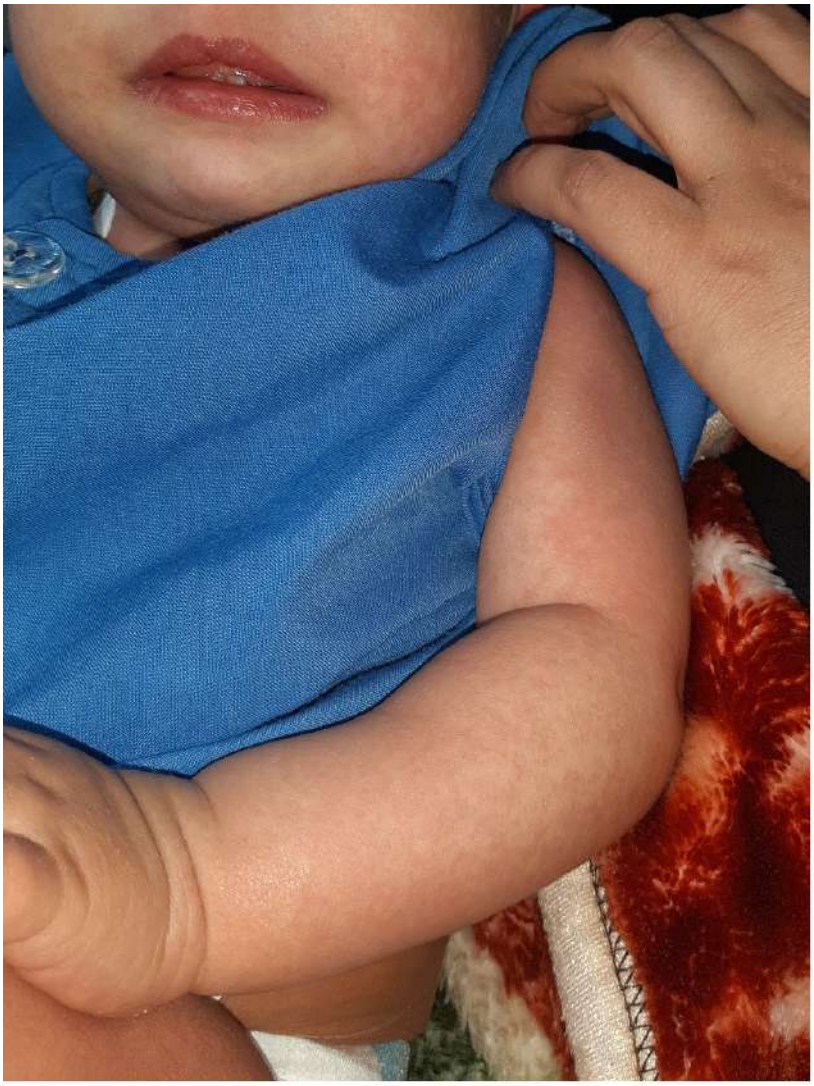

Figure 3-11. A 13-month-old infant who was hospitalized in ICU following heart surgery and two days after surgery, the COVID-19 PCR of the patient was reported positive. About 1 week after surgery, maculopapular lesions were appeared on the skin that can be viral or drug induced.

Figure 3-12. Generalized maculopapular lesions with pruritus in a 43-year-old pregnant woman with a gestational age of 32 weeks.

Figure 3-13. Generalized maculopapular lesions in a 70-year-old woman who was hospitalized due to COVID-19 with diffuse pulmonary involvement.

Figure 3-14. morbilliform erythematous rash with hemorrhagic/necrotic crust in some area, occasionally varicella-like lesions in a 22-year-old man with fever and malaise from 10 days ago.

Figure 3-15. Erythematous lesions with pruritus in a 2-year-old COVID-19 patient.




Figure 3-16. A 33-year-old COVID-19 patient that was affected with rhinocerebralmucormycosis during hospitalization and after surgery and antibiotic therapy, maculopapular rashes have been appeared on her skin.

4 - Mucosal lesions

Figure 4-1. Erosions on the lower lip mucosa.

Figure 4-2. Erosion on the lower lip.

Figure 4-3. Prominent lingual villi (strawberry tongue-like pattern).

Figure 4-4. Aphthous lesion.

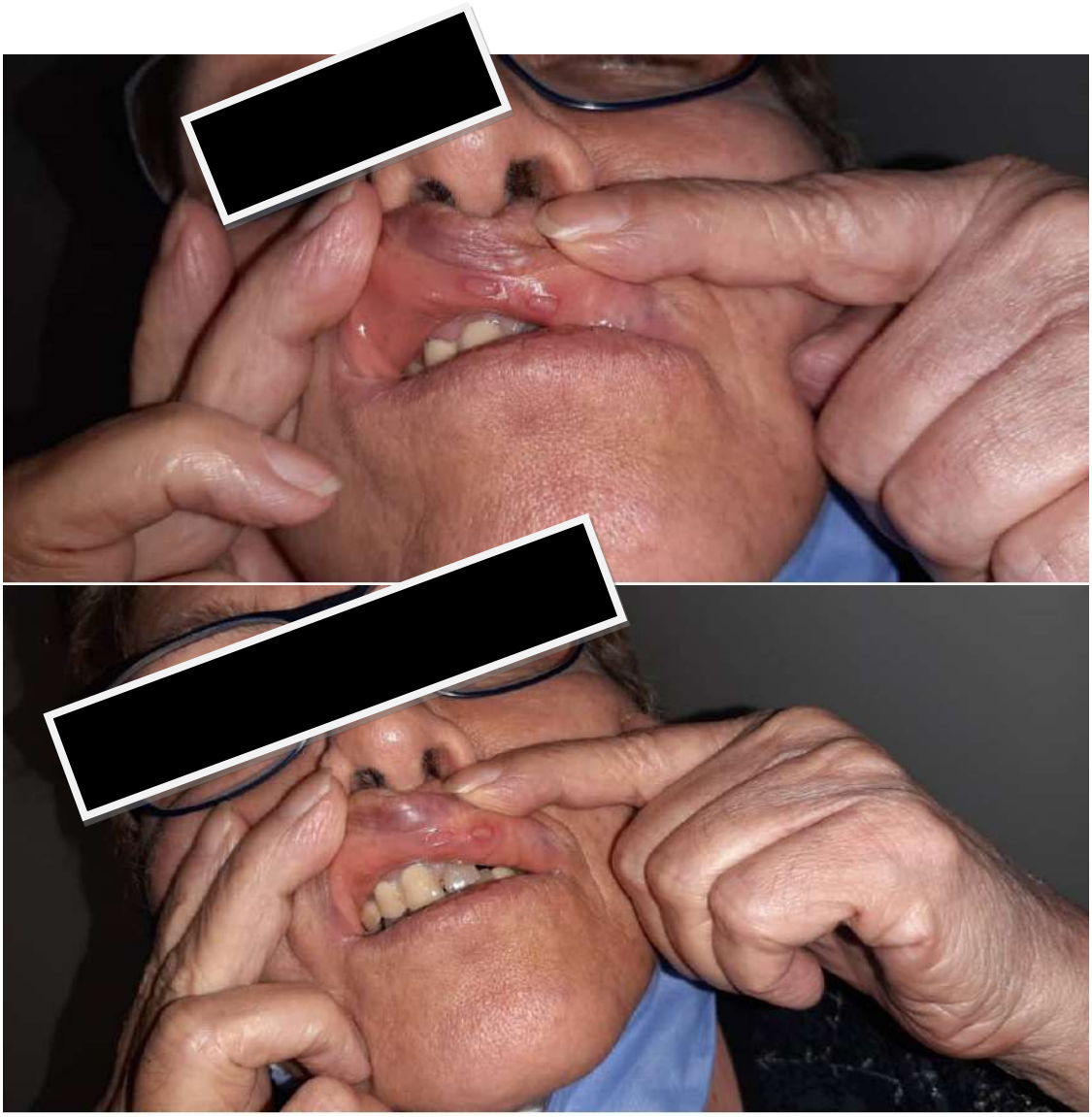

Figure 4-5. Aphthous lesions.

Figure 4-6. Erosion and erythema on the hard palate and glans of the penis.

Figure 4-7. Erosions with yellowish membrane on the tongue and lips.

Figure 4-8. Prominent lingual villi (strawberry tongue-like pattern).

5 - Urticarial lesions

Figure 5-1. Urticarial lesions on the acral site.

Figure 5-2. Generalized urticaria as a presenting sign of COVID-19.

Figure 5-3. Urticaria as presenting sign of COVID-19 that lasted several months after infection.




Figure 5-4. Urticarial in a 63-year-old man.

Figure 5-5. Urticaria with edema on the upper extremities.

Figure 5-6. Urticaria 2 days after COVID-19 infection.

Figure 5-7. Urticaria 2 weeks after COVID-19.

Figure 5-8. Urticaria

Figure 5-9. Urticaria 3 days after COVID-19.

Figure 5-10. Urticaria several weeks after COVID-19 and lasted for 8 months.

6 - Vascular injury


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Figure 6-1. Acral cyanosis.

Figure 6-2. Chilblain-like lesions.

Figure 6-3. Ecchymotic/necrotic lesions with a hemorrhagic bulla in an critical COVID-19 patientadmitted toICU.

Figure 6-4. A young girl with tender pruritic erythmatous-violaceous rash in acral sites compatible with pernio-chilblain like lesions (COVID toe), 10 days after COVID-19 infection, lasted about 4-6 weeks which needed to usage of topical steroid for treatment.

Figure 6-5. A 77-year-old man with petechia and purpura on the lower limbs 2 months after COVID-19.

Figure 6-6. Necrotic ulcer on the nose.

Figure 6-7. Ecchymotic/necrotic lesion on the leg of a severeICU admitted COVID-19 patient.

Figure 6-8. Ecchymotic lesions with bulla in an ICU admitted patient.

Figure 6-9. Non-blanchable purpura on the lower limbs.

Figure 6-10. Large ecchymotic lesion with superimposed bullae in an ICU admitted COVID-19 patient in a DIC-like situation also patient had a history of heparin injection.

Figure 6-11. Large ecchymotic and erosive lesions of legs in an ICU admitted COVID-19 patient with a history of hypercoagulopathy state.

Figure 6-12. Large ecchymotic lesion with superimposed bullae in an ICU admitted COVID-19 patient in the setting of DIC.

Figure 6-13. Necrotic ulcer.

Figure 6-14. Hemorrhagic vesicles and bulla.

Figure 6-15. Necrotic lesions.

Figure 6-16. Generalized ecchymotic lesions.

Figure 6-17. Ecchymotic lesion.

Figure 6-18. Generalized ecchymotic lesions suspected of disseminated coagulopathy.

Figure 6-19. Petechia and purpura 2 weeks after COVID-19.

Figure 6-20. Petechia and purpura 2 weeks after COVID-19.

Figure 6-21. Petechiaand purpura.

Figure 6-22. Petechia/purpura on the body and crusted lesion on the nose.




Figure 6-23. Livedoid vasculopathy.

7 - Vesiculobullous lesions

Figure 7-1. BP-like lesions in a critically ill COVID-19 patient.

Figure 7-2. Vesiculobullous lesions with mucosal involvement (EM/SJS) in a young COVID-19 patient with history of antibiotic therapy 1 week before cutaneous involvement.

Figure 7-3. Erythroderma, skin detachment, hemorrhagic crust on the lip and eye involvement in a 47-year-old woman, known case of ESRD, with previous history of antibiotic therapy.

Figure 7-4. Bullous lesions with skin detachment and mucosal involvement in a 56-year-old ICU-admitted COVID-19 patient with a history of antibiotic therapy.

Figure 7-5. Generalized maculopapular lesions with positive nikolsky sign and mucosal involvement in a CVA and COVID-19 patient under treatment of Depakin.

Figure 7-6. Cutaneous reaction in a COVID-19 patient on the treatment of Atazanavir, Favipiravir and Interferon.

Figure 7-7. SJS/TEN in a COVID-19 patient presented with seizure and arrhythmia, and under-treatment of depakin and remdesivir that finally leaded to death due to asystole cardiac arrest.




Figure 7-8. SJS/TEN.

Figure 7-9. Vesiculobullous lesion on the erythematous-edematous plaques (BP-like).

Figure 7-10. Bilateral grouped herpetiform vesicles.

8 - Specific newly onset mucocutaneous presentations or aggravation of previous dermatoses

Figure 8-1. A 35-year-old man with a history of psoriasis who was hospitalized with a diagnosis of COVID-19 6 weeks before cutaneous complication. During the hospitalization psoriasis due to administration of systemic steroids disappeared completely but flared more severely than before COVID-19, a few weeks after discharge.

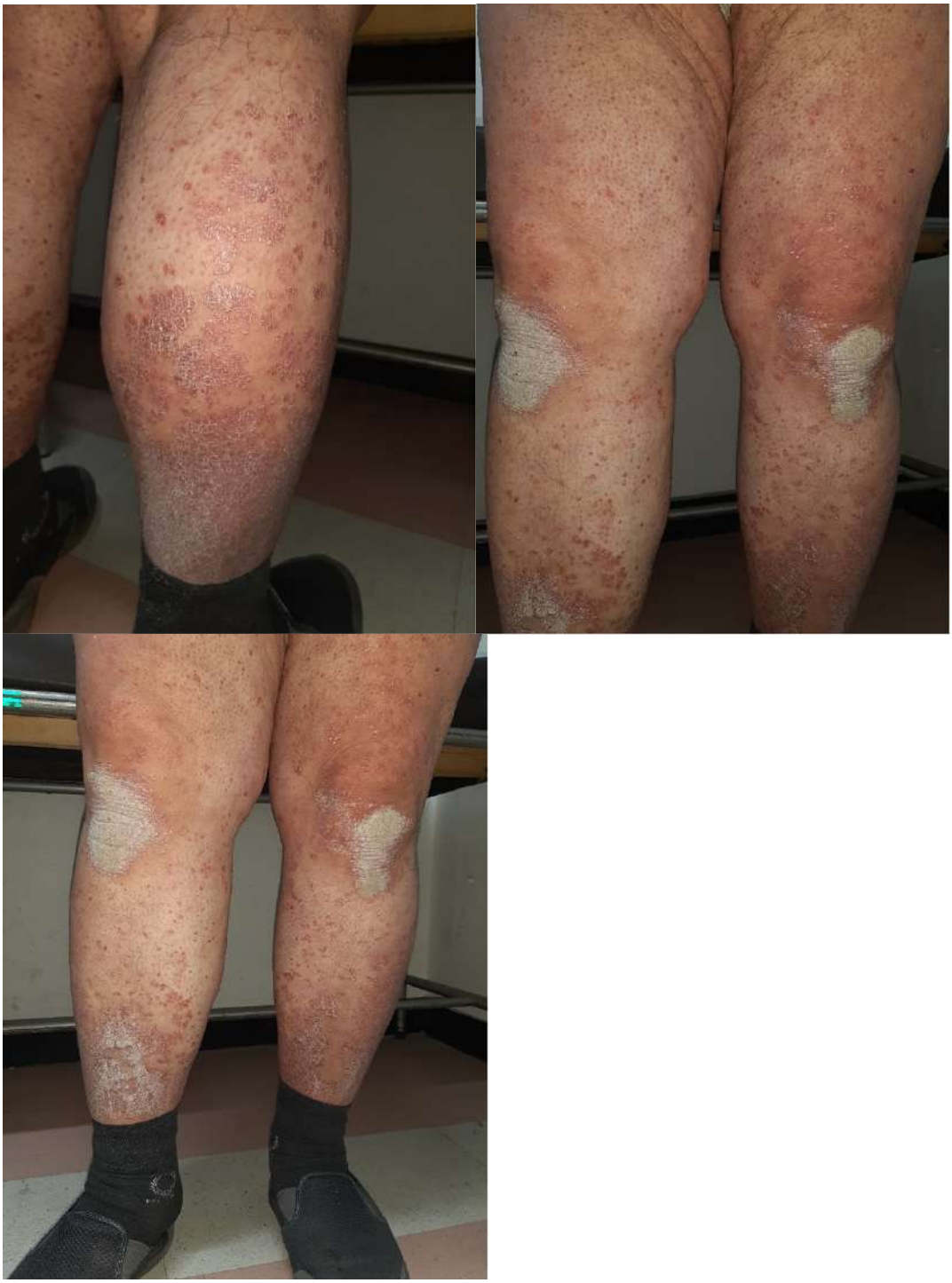

Figure 8-2. A 45-year-old stable psoriasis patient under treatment with TNF alpha inhibitor (cinnora) and methotrexate that after COVID-19 infection, his treatment was held and 2 weeks later his psoriasis disease flared.

Figure 8-3. Erosive lesions with hemorrhagic crust and mucosal involvement in an old COVID-19 patient with previous history of pemphigus vulgaris.

FIgure 8-4. Depigmented patches in a previously controlled vitiligo patient appearing after COVID-19 infection.

Figure 8-5. Asteatotic eczema in a hospitalized pulmonary COVID-19 patient.

Figure 8-6. Flare up of hand eczema 2 months after COVID-19 .

Figure 8-7. Progressive generalized sclerodermoid changes in a 50-year-old woman, 3 months after COVID-19 infection with positive ANA and high ACE serum level.

9 - Nail changes

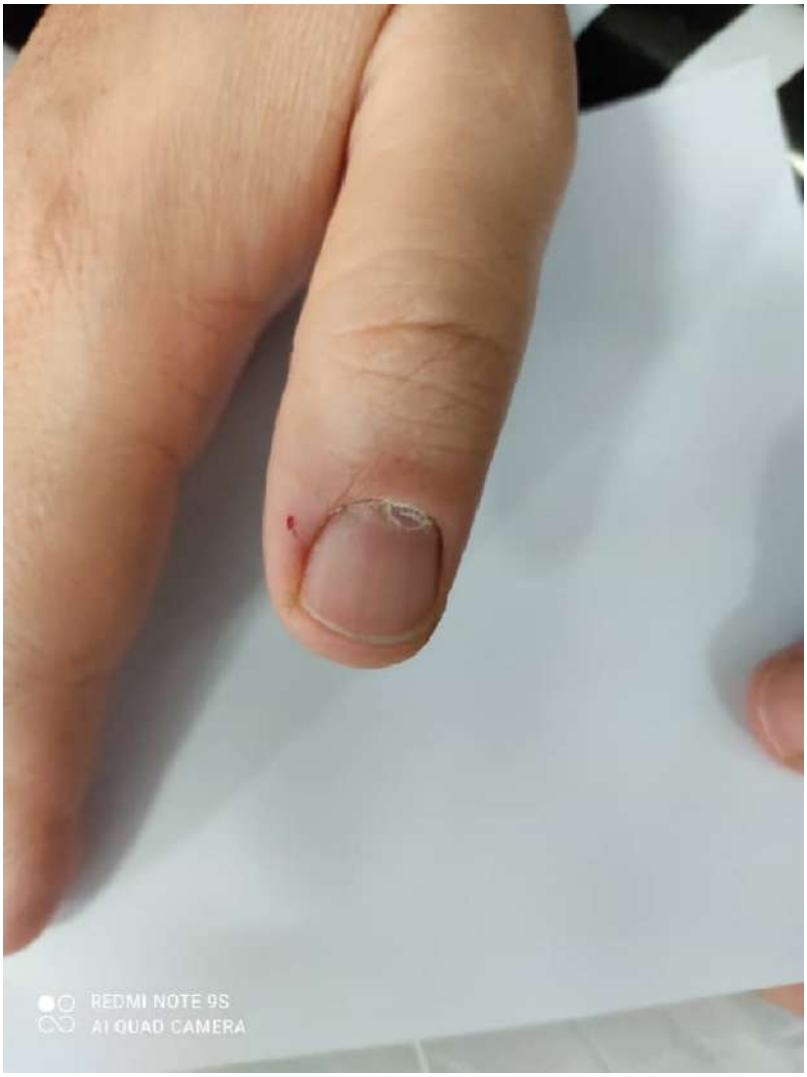

Figure 9-1. Onychomadesis 3 months after COVID-19.

Figure 9-2c. Beau's lines and pitting 8 months after severe COVID-19 infection.

Figure 9-3. Onycholysis and onychomadesis 5 months after COVID-19.

10 - Hair changes

Figure 10-1. Telogen effluvium 3 months after COVID-19.

Figure 10-2. Severe telogen effluvium 8 weeks after COVID-19.

11 - Non-specific complications

Figure 11-1. Candidiasis.

Figure 11-2. Tinea cruris and corporis.

Figure 11-3. Folliculitis.

Figure 11-4. Drug-induced acne.

Figure 11-5. Drug-induced acne.

Figure 11-6. Drug-induced acne.

Figure 11-7. Telogen effluvium and acne flare-up after COVID-19.

Figure 11-8. Drug induced acne.

Figure 11-9. Herpes zoster 2 weeks after COVID-19.

Figure 11-10. Herpes zoster 5 weeks after COVID-19.

12 -Post COVID-19 vaccine reactions

Figure 12-1. Erythema multiformis after COVID-19 vaccination.

Figure 12-2. PR lesions 10 days after COVID-19 vaccination. (Astrazeneca)

Figure 12-3. Erythematous and scaly lesions 3 weeks after COVID-19 vaccination. (Astrazeneca)

Figure 12-4. PR-like lesions after COVID-19 vaccination.

Figure 12-5. Generalized urticaria 1 month after COVID-19 vaccine. (Astrazenca)

Figure 12-6. Urticaria 20 days after COVID-19 vaccination. (Sputnik)