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A pruritic eruption following gastric bypass surgery

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Introduction

- Prurigo pigmentosa is a rare inflammatory dermatosis characterized by pruritic, erythematous papules and papulovesicles on the back, neck and chest.
- The cause is not well elucidated, but it has been associated with ketotic states.
- We present the second case of prurigo pigmentosa after gastric bypass surgery.

Case Presentation

- A 38 year-old African American female presented for evaluation of a rash on her neck, chest and back that initially began 2 weeks after gastric bypass surgery.
- It began with pruritus of the palms and small pruritic papules on her lower back.
- It spread to involve patchy areas of the lower back, chest, lateral neck and behind the ears.
- New lesions continued to appear every few days and old lesions would resolve with hyperpigmentation.
- On exam, indurated papules were noted in clusters behind both ears, on her right lateral neck, beneath the breasts, and in a linear band on the midline lower back.

Histopathology

- A punch biopsy showed superficial and deep lymphocytic inflammation and focal interface dermatitis.
- Endothelial cells were swollen, there was red cell extravasation and rare eosinophils were noted.

Figure Legend

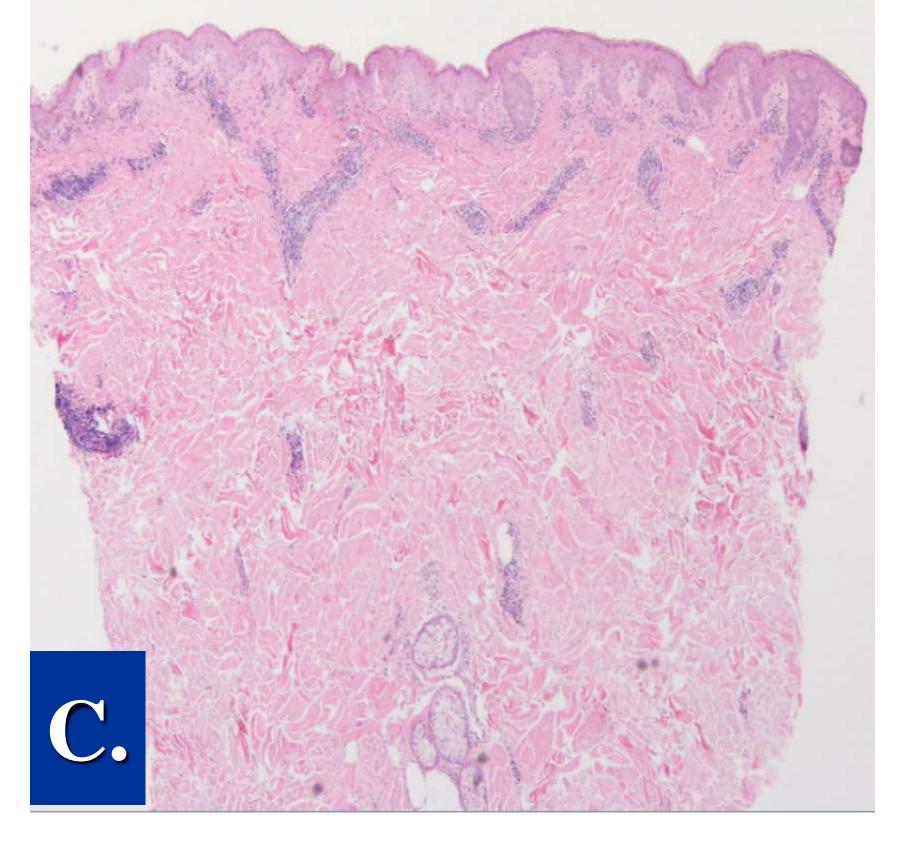
Figure 1: Indurated papules on the right lateral neck and in linear band on midline lower

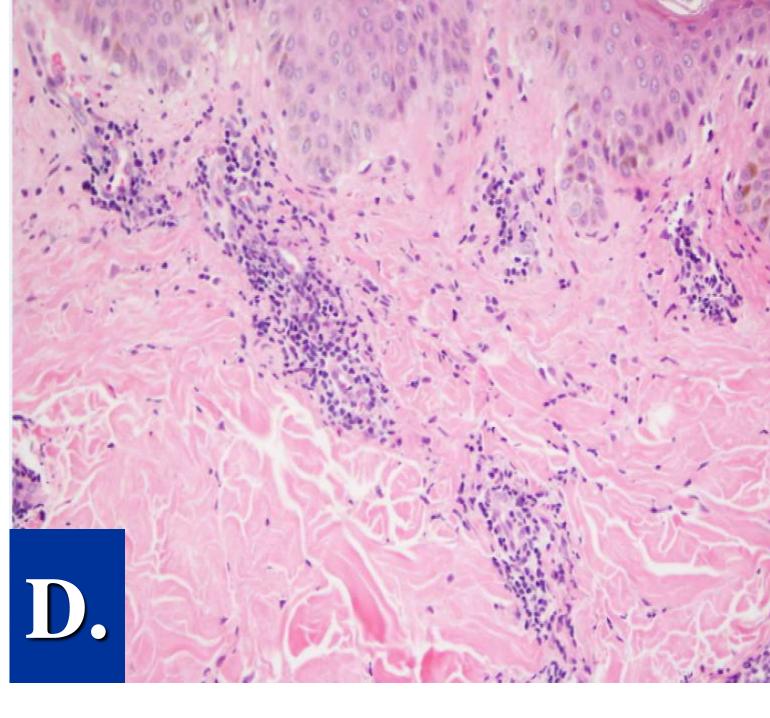
Figure 2: Patchy superficial lichenoid lymphocytic infiltrate and deep lymphocytic infiltrates. Focal parakeratosis, mild spongiosis, red cell extravasation and dermal melanophages are also present.

Figure 1



Figure 2





Clinical Course

- She was started on minocycline 100 mg twice daily for two weeks.
- The eruption resolved and remained quiescent even after discontinuation of minocycline, although she had residual hyperpigmentation.

Discussion

- Prurigo pigmentosa is a rare inflammatory dermatosis that starts as crops of inflammatory lesions that undergo multiple stages.
- Lesions involute within a week and leave macular reticulated hyperpigmentation.
- It occurs more commonly in young adults, especially females.
- Traditionally, it had been described in the Japanese population, however recently there have been cases reported in the Middle East and Western countries.
- The exact cause and pathogenesis is still unclear. However, it has been associated with ketotic states seen in dieting, diabetes mellitus, soft-drink ketosis and religious fasting.
- Studies have found elevated blood and urine ketones in patients with prurigo pigmentosa and noted clearance of skin lesions when ketosis resolved.
- There has been one prior report of prurigo pigmentosa following bariatric surgery, and we present the second.
 - The histological features vary depending on the stage of the condition.
- Prurigo pigmentosa is believed to be mediated by neutrophils and patients respond well to medications that have an anti-neutrophil effect including tetracyclines and dapsone.
- Recurrence may occur after treatment cessation.

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