

CASE REPORT

Rhinophyma on hemangioma: a diagnostic conundrum

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ABSTRACT

Introduction: Rhinophyma, aside from persistent centrofacial redness is a major diagnostic criteria for rosacea. Phyma may be mistaken for hypertrophy of tissue due to an underlying hemangioma.

Case report: A 35-year-old female presented with few erythematous papules on the face and nose 19 years prior to consult. Lesions evolved into multiple erythematous nodules on nose and was mistaken for tissue hypertrophy due to an adjacent congenital hemangioma. Her hemangioma was treated with pulsed dye laser 16 years prior with noted decrease in size and erythema. Recently she noticed enlargement of her nose with persistent redness. She presented with multiple firm, thick irregularly shaped erythematous nodules with prominent pilosebaceous pores and telangiectasia on the nose. Skin punch biopsy was done which revealed hypertrophy and lysis of sebaceous lobules with a moderately dense inflammatory infiltrate of lymphocytes. Histopathological diagnosis was rhinophyma. Patient was treated with low dose isotretinoin (0.20 mg) with marked flattening of lesions in just one month.

Conclusion: Distinguishing phyma from tissue hypertrophy caused by hemangioma poses as a diagnostic challenge. Careful dermatological examination and histopathological findings will aid in correct diagnosis. Low dose oral isotretinoin is an effective treatment for rhinophyma.

Key words: Rosacea, rhinophyma, hemangioma, isotretinoin

INTRODUCTION

In accordance to recent guidelines, there are two diagnostic features of rosacea: 1. fixed centrofacial erythema in a characteristic pattern that may periodically intensify, and 2. phymatous changes.¹ Presence of one of these features in a patient is sufficient to clinically diagnose rosacea. Phymata is firm, non pitting, hypertrophic lesion associated with

rosacea. It is a persistent, and asymptomatic lesion which can occur on the nose, chin, forehead and eyelids. Phymatous change on the nose is specifically termed as rhinophyma.² Given its appearance and chronicity, rhinophyma may be mistaken for congenital hemangioma on the nasal area.

CASE REPORT

A 35-year-old female presented with few erythematous papules on the face and nose 19 years prior to consult. Lesions increased in size and number evolving into multiple erythematous nodules on nose and was mistaken for tissue hypertrophy due to an adjacent congenital hemangioma. Her hemangioma was treated with pulsed dye laser 16 years prior with noted moderate decrease in size and erythema. Few months prior, patient noticed enlargement of her nose accompanied by persistent redness. Upon clinical examination, she presented with multiple firm, thick irregularly shaped erythematous nodules with

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prominent pilosebaceous pores and telangiectasia on the nose (Figs. 1 & 2).

A 3-mm skin punch biopsy was done. Histopathologic examination revealed hypertrophy and lysis of sebaceous lobules with a moderately dense perivascular and periadnexal inflammatory infiltrate of lymphocytes (Figs. 3 & 4). Histopathological diagnosis was rhinophyma.

Patient was treated with low dose oral isotretinoin (0.20 mkd). There was noted flattening of lesions within one month of treatment.

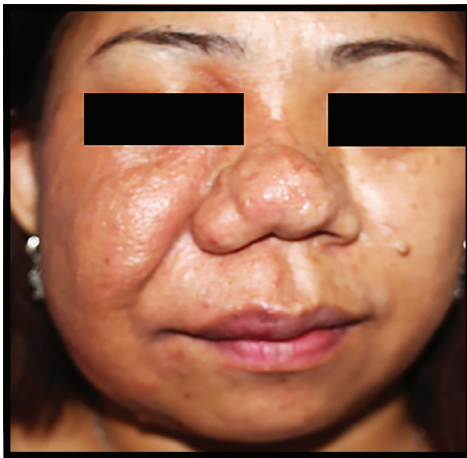


Figure 1. Clinical photo at baseline



Figure 2. Clinical photo after 1 month of oral isotretinoin at 0.20 mkd

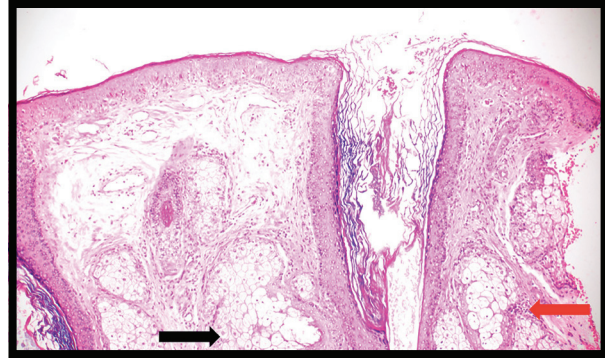


Figure 3. Histopathology revealed mild spongiosis of the epidermis, dilated follicular infundibulum, numerous and enlarged sebaceous lobules (black arrow) and a periadnexal inflammatory infiltrate (red arrow) of lymphocytes and histiocytes. Telangiectasia of blood vessels were noted. (H & E, x 400).

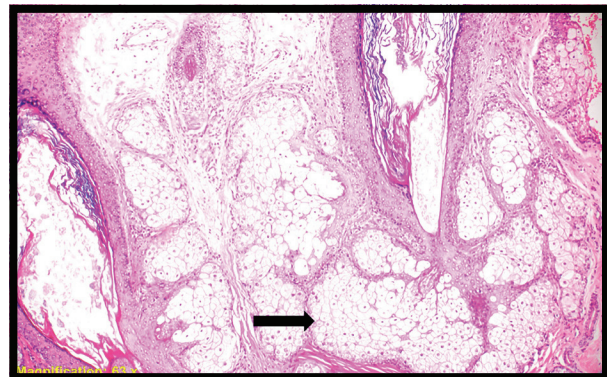


Figure 4. The mid dermis shows abundance of enlarged sebaceous lobules (black arrow), telangiectasia of blood vessels and a mild, perivascular infiltrate of lymphocytes and histiocytes (H & E x 400)

Discussion

The patient was previously diagnosed as case of congenital hemangioma, a blood containing true neoplasm of endothelial cell origin.³ Despite treatment with pulse dye laser, however, lesions were still noted to enlarge and increase in number.

Skin punch biopsy is not warranted in diagnosing rosacea. In cases like this, however, wherein other diagnoses must be ruled out, it is then recommended.⁴ Follicular plugging, dermal mucin deposits, sebaceous

gland hyperplasia, dermal thickening and fibrosis, and telangiectasia are typical histopathological findings for phymatous change.⁵ Histopathologic examination of biopsy specimen obtained from the patient coincided with that of phyma. Patient's concomitant hemangioma masked the presence of phymatous change. This case study highlights the importance of careful dermatological examination and histopathological examination in diagnosing phyma. Low dose oral isotretinoin, which is known to be effective in treating recalcitrant papulopustular rosacea,⁶ is also effective in treating phyma.

Conclusion

Phymatous change can be masked by concomitant hemangioma. Distinguishing phyma from tissue hypertrophy caused by hemangioma remains as a diagnostic challenge for any physician. Cautious dermatological examination and histopathological findings are keys to ensure correct diagnosis. Low dose oral isotretinoin is an effective treatment for rhinophyma.

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