

Integrative medicine atlas of skin diseases

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Evidence shows that Ayurveda and biomedical systems of medicine recognize the same disease albeit with minor difference in clinical description. We illustrate through clinical photos of Lymphoedema, Vitiligo, Psoriasis, Lichen Planus, bullous lesions, etc. the interpretation of diseases when both doctors of Ayurveda and Allopathy examine the patients together. Comparable clinical features in allopathy for Ayurveda's Vatha, Pitta and Kapha doshas are shown for different presentations in patients. This atlas is a guide for Integrative Medicine clinical methods to develop *Sthaneeya vikruthi* table, the first step in integrating Ayurveda and Allopathy for any disease and leads to the integration of Ayurveda and biomedicine at treatment level in dermatology irrespective of background understanding of the disease.

Keywords: Atlas of skin diseases, Ayurveda, biomedicine, clinical pictures in Ayurveda, Integrative Medicine.

CURRENT SCIENCE has often debated on integrative medicine (IM) and published studies on Complementary and Alternative Medicines (CAM) and its integration with Western biomedicine (commonly known as Allopathy in the eastern world) since the first half of 1990 (ref. 1). The *British Medical Journal* later defined IM as 'practicing medicine in a way that selectively incorporates elements of complementary and alternative medicine into comprehensive treatment plans alongside biomedical methods of diagnosis and treatment'².

Institute of Applied Dermatology (IAD), took leads from these publications and established IM patient care protocols for skin diseases. Examining patients together by dermatologist and Ayurvedist during the first and subsequent follow-up visits to IAD showed that disease recognition, clinical methods and effective treatments exist in Ayurveda for many named diseases of Allopathy. IM uses the clinical diagnosis of Allopathy and treatments given include Ayurveda, Yoga and that of Allopathy. When patients are anxious exhibiting multiple seemingly unconnected symptoms disproportionate to the clinical signs (known as 'mental symptoms')³, Homoeopathy treatments are added because homoeopathy treats patients on the basis of 'totality of symptoms'. Biomedical part of therapies in IM is limited to infection control

and/or safe and proven drugs. Our studies in the past have outlined the Ayurvedic guidelines for patient treatment⁴. When strictly followed with clinical wisdom, expected results described in traditional textbooks were achieved using Ayurveda drugs. IM adopts the most objective parameters for diagnosis and prognosis using whichever system described them best⁵.

In the atlas we have used the clinical diagnosis of allopathic dermatology. Clinical methods are described using photographic illustrations, as examples for constructing the *Vikruthi* table⁴, the first clinical step before selection of an Ayurvedic drug. The *Vikruthi* table for any disease could be developed only after a series of patients have been examined by IM group of doctors. Baseline photographs and clinical notes for each patient examined should be pooled to develop the *Vikruthi* table. *Vikruthi* table illustrates clinical features of skin diseases and their comparable Ayurvedic and Allopathic terminologies facilitating *Dosha*-based drug selection for both Ayurveda and Allopathy doctors. Examples are illustrated in Figures 1 to 23.



Figure 1. Local skin pathology (*Sthaneeya vikruthi*) in filarial lymphoedema (*Shleepada*)⁶. **a**, Xerosis on inspection (*Ruksha*) (arrow 1), fissures (*Sphutana*), 'black' pigmentation (*Krishna*) are *Vatha*-dominant features. This patient complained of pricking pain (*Theevra thoda*) suggesting *Vatha* dominance. **b**, Left lower limb with erythema/redness (*Raktavarna*) largely edematous (*Adhika shopha*), compared to the normal right limb, suggestive of *Pitta*-dominant lymphoedema. The limb with *pitta*-dominant *sthaneeya vikruthi* is often associated with discharge (*Samsrava*) and soft to touch (*Mrudu*). Occasionally patients complain of increase in volume of oedema and heaviness (*Gurutwa*) after walking for sometime, which is due to *Sara guna* of *Pitta*. **c**, Limb with nodules (arrow 2)/warty growth (*Bahukantakai parivrtam*), oily/shiny (*Snigdha/Snigdha varna*), organized (*Drudham/Sthiram*) and huge in size (*Sthoola*). Patients always feel heaviness because of lymph stagnation for long duration and tissues such as collagen replacing lymph fluid. This is comparable to *Ghana guna* of *Kapha* in *Shleepada*.

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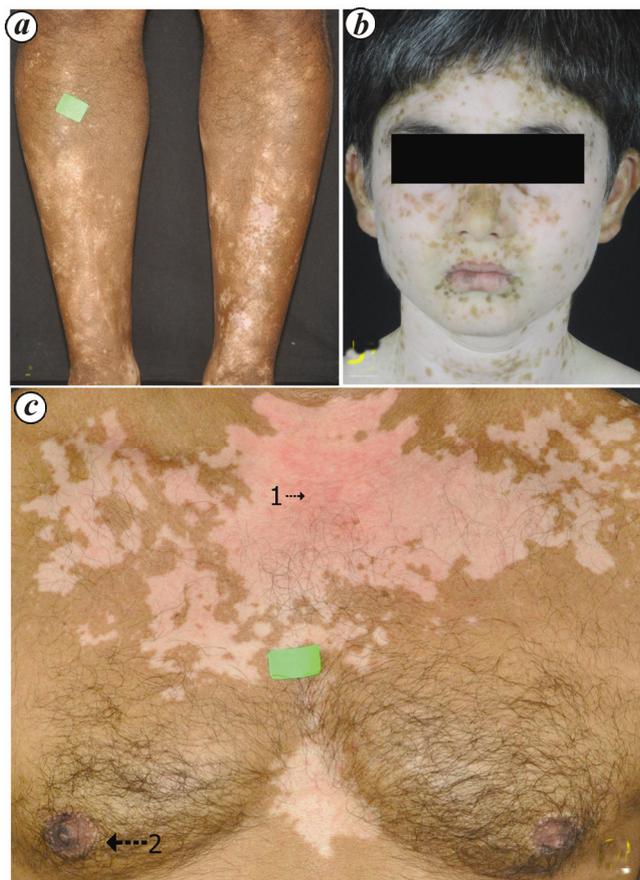


Figure 2. Local skin pathology (*Sthaneeya vikruthi*) of vitiligo (*Shwitra*) lesions⁷. **a**, Lesions are dusky red (*Aruna varna*); many of them are round (*Mandala*) and hence *Vatha* dominance. **b**, Oily on appearance (*Snigdha varna*), bright white (*Shweta*) lesions exhibit dominance of *Kapha*. Lip involvement indicates that disease is incurable (*Asadhya*). **c**, Colour similar to lotus petal (*Padmapatra prathikasha*) (arrow 1) of vitiligo, indicating *Pitta* dominance. Both areola are beginning to get depigmented (arrow 2); another sign of incurable disease.



Figure 3. (a) Palmoplantar psoriasis and (b) Pustular palmoplantar psoriasis. There are fissures (*Pada sphutana*) (arrow 1) in both conditions, with pain (*Theevra vedana*). Multiple pustules (arrow 2) of psoriasis can be observed in (b). Ayurveda describes both lesions as *Vipadika*⁸, which is *Kapha vatha*-dominant. When there is *Pitta* dominance, pustular psoriasis occurs.



Figure 4. **a**, Lymphoedema patients with *Shyava* discolouration. Pigmentation due to long-standing varicose veins (arrow 1). The patient also has associated peripheral arterial disease and giddiness after suddenly getting up and quickly walking. **b**, Posterior thigh showing erythema (arrow 2), and lower leg shows pigmentation associated with chronic venous ulcer (arrow 3) which results in restricted ankle movements. Patient has congenital Klippel Trenauny Weber syndrome and congenital limb length inequality.

There is no description in Ayurveda for oedema, associated with symptoms related to movement. Although *Shyava* is a *Vatha* condition, *Vatha hara* drugs did not improve the symptoms and colour without compression therapy of Allopathy.

Certain symptoms and signs in skin diseases often indicate presence of underlying systemic diseases. Recognizing such manifestations of internal disease is part of training in dermatology. Integrative Medicine trains Ayurveda doctors to recognize associated diseases that often needs support of acute care from Allopathy.

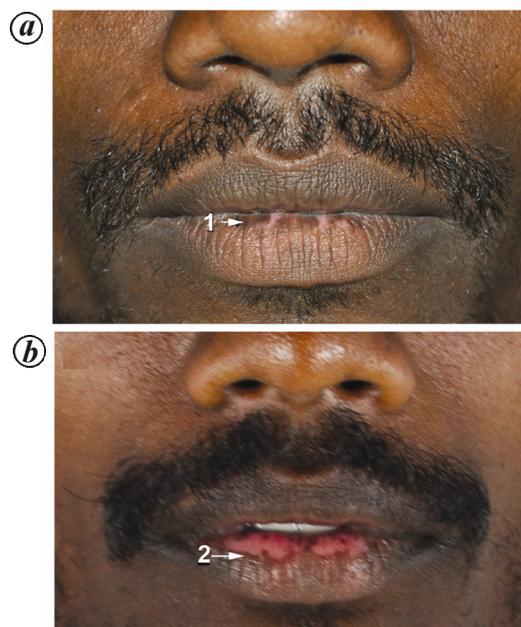


Figure 5. **a**, Repigmentation (arrow 1) observed on lip lesion of vitiligo after integrative treatment which included *virechana* and *Dhathryadi kashayam*. **b**, Vitiligo lesions present in lip (arrow 2) and tip region (*Anthejatham*) are considered as incurable (*Asadhya*) in Ayurveda⁹ and allopathy. In this patient the disease existed for over three years before he took integrative medicine treatment.

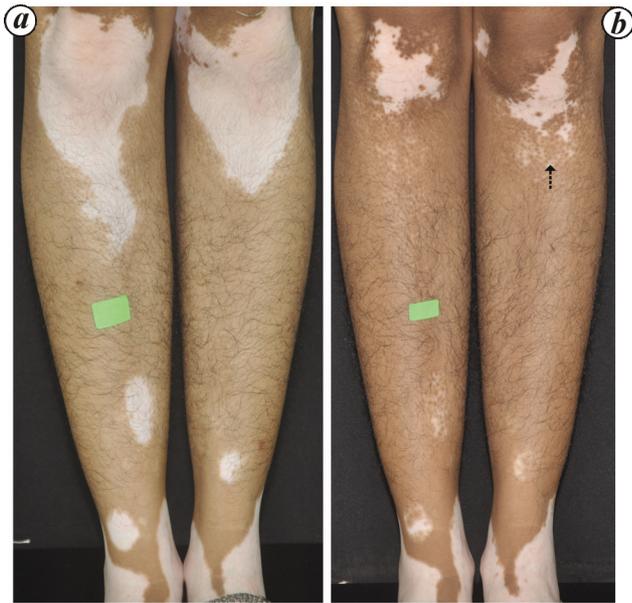


Figure 6. Repigmentation in vitiligo lesions following integrative medicine. *a*, Bright white (*Shwetha*) lesions of *Kapha* dominance. *b*, Follicular repigmentation is observed after six months of integrative treatment. Follicular repigmentation indicates *Vatha* dominance (arrow). It shows reversal of disease progression (*Dhathu gathatwa*)¹⁰ from *Kapha* (*Medo dhathu*) dominance to *Vatha* (*Rakta dhathu*) dominance (arrow). According to Ayurveda, *Dhathu gathatwa* is a phenomenon of worsening disease. There is no description of its reversal in traditional Ayurveda literature.



Figure 7. A Vitiligo patient showing different *Sthaneeya vikruthi* in different body areas. The colour of lotus petal (*Padma pathra pratheekasha*) at the exposed area (arrow 1), which is a symptom of *Pitta* dominance. Other lesions are bright white (*Shwetha*), oily in colour (*Snigdha varna*) with *Kapha*-dominant feature (arrow 2). The areola is depigmented (arrow 3), a sign of incurable (*Asadhya*) disease. Such a presentation will influence drug selection in Ayurveda. Although the patient has *Kapha*-dominant lesion, administration of Ayurveda *Theekshna* property drugs (like *Psoralia corylifolia* containing *Dhathryadi kashayam*) is likely to aggravate *Pitta* and thereby aggravate the disease. In such cases, vitiligo presentation varies and may well represent more than one pathology even in the same affected person; differing lesions may occur or disappear or be in a resting stage. This is better recognized by Ayurveda than by Allopathy⁵.



Figure 8. Erythematous plaque (arrow 1) suggestive of chronic plaque psoriasis. There are rounded (*Mandala*) lesions with erythematous borders (*Rakthantham*; arrow 2) and fading erythema in middle (arrow 3) leading to central clearing. This is a healing lesion of psoriasis. There is no specific description for this kind of presentation in Ayurveda's *Mandala kusta*¹¹, a disease resembling psoriasis.



Figure 9. Differential diagnosis for vitiligo. (*a*) Pityriasis alba (arrows) and (*b*) patient with early depigmented lesions all over the body. The lesions were xerotic (*Ruksha*) on inspection. The underlying pathology is that of *Vicharchika* (pruritic lesions with discharge)¹². Patient was in a remission stage of atopic dermatitis. (*c*) Para psoriasis patient with hypopigmented lesions suggestive of *Shwittra* with *Vatha* dominance. *Shwittra hara* treatment is likely to aggravate these diseases.



Figure 10. Pustular lesions in psoriasis. The psoriatic lesions have papules (*Pidaka*) with erythema and pustules (*Shwetham raktha paryantham*; arrow), which shows *pitta* dominance. The *pitta hara* treatment (like *Patola katurohinyadi kashayam* or *Kaishora guggulu*) may help in this condition. There is no erythematous plaque as in *Rshyaji-hwa kusta* (plaque psoriasis) or scales (*Mathsya shakalopama*) as in *Eka kusta*. Other types of psoriasis may involve *Vatha* or *Kapha* also.



Figure 11. The violaceous (*Shyava/asitha*), elevated (*Utsedha*) lesions over both lower limbs with xerosis (*Ruksha*) on inspection and uneven surface (*Parusha/Khara*) on palpation. Patient had severe pruritis (*Kandu*), which disturbed sleep and the lesions were often associated with excoriations (arrow 1). These features are suggestive of *Kapha vatha*-dominant *Vikruthi*. This has no specific nomenclature in Ayurveda. Allopathy diagnosis is hypertrophied lichen planus. Depigmentation (*Shwetha varna*) is observed due to repeated injury (arrow 2) and should not mistaken for *Vranaja shwitra*.



Figure 12. Lymphoedema (*Ekanga shophya*) with peripheral arterial disease. The shape of the limb is known as inverted champagne bottle (arrow). There is no specific description for the same type of lymphoedema in Ayurvedic texts. Although compression therapy is a standard treatment for lymphoedema in Allopathy, compression bandage is contra indicated in this clinical situation because of possible arterial insufficiency. *Vatha raktha* treatment is beneficial for this condition, since both lymphoedema and peripheral arterial disease can be correlated to *Marga rodha*. The literal meaning to this would be obstruction to the channels (*Srothas*) of basic body tissues (*Dhathu*).



Figure 13. Dermatitis medicamentosa developed following massage (*Abhyanga*) of *Nalpamaradi thailam*. *a-c*, Erythema (*Raktha*), warmth (*Thapa*) on palpation and burning (*Daha*) (in *a* and *c*), bullae (*Sphota*) with yellowish (*Peetha*) discoloration, discharge (*Srava*; arrow) (in *b*) are suggestive of *Pitta prakopa*, which is due to *Kapha vatha hara* action of *Nalpamaradi thailam*. The heat (*Ushna*) property of oil is responsible for amelioration of both *Vatha* and *Kapha*; both are required to treat lymphoedema (*Shleepada*). When a patient has *Pitta*-dominant *Prakruthi*, using *Kapha vatha hara* medication may aggravate *Pitta*, leading to *Pitta prakopa*. However, this side effect is uncommon. Allopathy describes it as irritant dermatitis to oil. *Nalpamaradi thailam* was stopped and the patient was treated with topical betamethasone dipropionate cream of Allopathy.



Figure 14. A 24-year-old male presented with grouped vesicles (arrow 1) and bullae (arrow 2) with itching and erythema of the affected area. Patient had similar lesions scattered all over the body. He had urticarial lesions with itching on and off for the past two years. Initially Urticaria responded to Allopathic treatments. Later urticarial lesions did not respond to allopathic treatment (arrow 3). Later the patient took Ayurvedic treatment (unlabelled Ayurvedic medication), after which vesicular and bullous lesions erupted over erythematous skin. The lesions were intensely itchy. Dermatitis medicamentosa, an allergic skin reaction for topical medication was considered. However, because of the long history, biopsy was done. Histopathological findings revealed features of bullous pemphigoid. Biomedical drugs such as ceftriaxone are known to give rise to drug-induced patterned bullous lesions, such as pemphigus. Such side effects are not reported after Ayurvedic medication. The history and clinical features in this patient are typically suggestive of bullous pemphigoid, which presented initially as urticaria and later as persisting urticaria. In this case report Ayurvedic medication precipitated the classical manifestation of bullous pemphigoid.



Figure 15. Generalized lesions (*Bahala*) due to *Kapha* dominance. *a*, Guttate psoriasis (*Mandala kusta*) is a *Pitta kapha*-dominant condition. *b*, Ichthyosis is a *Vatha*-dominant disease presenting as xerosis on inspection and palpation (*Ruksha/Parusha*). *c*, Vitiligo (*Shwitra*) and *d*, lichen planus are *Kapha*-dominant diseases. If *bahala* characteristic is observed in a *Kapha* dominant disease, it is difficult to treat. Diseases originating from *Vatha* and/or *Pitta* may respond to treatment in spite of patients presenting with *Bahala* (generalized disease).



Figure 16. Elevated (*Utsedha*) lesions in different diseases: (*a*) prurigo, (*b*) lichen planus, (*c*) keloid and (*d*) lymphoedema. The *Utsedha* has *Kapha* dominance but attains different patterns due to other features of *Sthaneeya vikruthi*. Application of *Mahamarichadi thailam* is beneficial in lichen planus lesions, but not for keloid or lymphoedema. Each clinical presentation should be treated with holistic understanding of the disease.



Figure 17. *a*, Lymphoedema patient with lymphangiectasia and lymphorrhoea. *b*, Sarcoma, a rare form of malignancy developed over a lymphoedema leg. Both conditions have erythema (*Rakta varna*), discharge (*srava*), and papular lesions (*Pidaka*), indicating *Pitta* dominance. Patient showed improvement after *Pitta hara* treatment (*a*), whereas there was no response in case of sarcoma (*b*).



Figure 18. Patient with chronic, discharging, thick plaque on the axillae and groin. The lesion is macerated (*Snigdha*) and well-defined borders presenting with a combination of white (*Shwetha*), erythema (*Raktha*) and black (*Shyava*) at the edge of the lesion, showing *Thridoshaja* features. Biopsy showed separation of dermo epidermal junction. Diagnosis of familial benign pemphigus was made. Several such diseases have no parallel nomenclature in Ayurveda, although drugs can be selected on the basis of pathological basis of disease (*Dosha vaishamy*)



Figure 19. *a*, Lichen planus on the right knee: well-defined plaques (arrow) of violaceous colour (*Shyava*) with slight scaling on the surface can be seen. *b*, The same patient had nail changes with destruction of nail plate, scaling and elevation of nail bed. Biopsy of both lesions showed features of lichen planus. These nail changes are described in Ayurveda as *Kunakha* with xerosis on palpation (*Parusha*) in nail plate. The *Kunakha*¹³ is the condition of *Vatha pitta* dominance. In Ayurveda, clinical features in (*a*) and (*b*) are recognized as caused by separate pathology. Lichen Planus of nail is a difficult condition to treat. However Ayurveda ameliorates Lichen Planus.



Figure 20. Elevated (*Utsedha*), violaceous (*Shyava*) lesions over both shins associated with severe itching. There are excoriated wounds due to itching. The features suggest *Kapha vatha* dominance. In dermatology, this lesion is described as prurigo nodularis with well-defined papular/nodular itchy lesions with black discoloration. The lesions were limited to the pretibial region. This patient did not respond to routine treatment of Allopathy. Ayurvedic *Kapha vatha hara* treatment (*Maha marichadya* oil¹⁴, *Mahamanjistadi kashayam*¹⁵ and *Kaishora guggulu*¹⁶) was added to the regimen, but the patient did not respond. Biopsy showed features of pretibial dermolytic epidermolysis bullosa pruriginosa. Histopathology suggested focal thinning and subepidermal cleavage in epidermis, follicular plugging and other features. The *Kapha* (pruritis, elevated lesions), *Vatha* (violaceous, xerosis) manifestations masked (*Avarana*) the *Pitta* vitiation (bullae), resulting in worsening of the disease status when treated with *Kapha vatha hara*.



Figure 21. *a*, Tense bullae (arrow 1) over ventral aspect of forearm. Post-inflammatory hypopigmentation (*Vranaja shwitra*; arrow 2) with atrophy due to repeated denudation and spontaneously healing bullae. *b*, Generalized body involvement with similar lesion (*Bahala*) are also observed. The skin is xerotic (*Ruksha*) and *Vrana* is erythematous (*Raktha*). Patient aged 23-years-old, had intense pruritis (*Kandu*), grouped bullous lesions and multiple denuded areas from the age of two years. The bullae below knee joints showed clear discharge (*Thanu srava*). The injury resulted in repeated bullae and it extended all over the body, except face and scalp. Clinically, this case was diagnosed as epidermolysis bullosa and biopsy showed linear IgA dermatosis. The lesions have symptoms of all the *Dosha* (*Thridosha linga*).



Figure 22. Differential diagnosis (*Vyachedaka nidana*) of lichen planus: *a*, a patient with black pigmented, elevated nodular lesions since 5 years. Although began as erythematous and pruritic papules, due to long standing disease and repeated scratching, lesions increased in size presenting as excoriated, darkly pigmented (*Krishna*) nodules. On palpation, they were firm (*Ghana*). Such lesions were present on both upper extremities below elbow joints and on both lower extremities below end of calf muscles, as well as on neck and on the scalp. Lesions spared the medial side of the upper extremities. Clinical features suggested prurigo nodularis. Biopsy of encircled lesion showed features of prurigo nodularis. Prurigo nodularis is psychosomatic disorder, very resistant to topical treatments of Allopathy and Ayurveda. Prurigo responds to stress management regimens of Homoeopathy. In Ayurvedic description *Dosha vaishamyam* of lichen planus (see figure 11) and prurigo nodularis are same. Integrative Medicine recommends stress relieving (*Mano dosha hara*) treatment as an option along with specific *Dosha hara* drugs. *b*, Lichen planus pigmentosus: hyperpigmented (*Shyava*) bizarre, macular lesions, all over the body. This is suggestive of *Vatha* dominance, requires medicated ghee (*Ghritha*) as per Ayurvedic literature. *c*, Tinea Capitis: Scaly, black (*Krishna*) dirty lesions that peels off with hairs leaving area of alopecia. This condition is *Indralupta*. *d*, Lichen amyloidosis: Multiple (*Bahu*) discrete hyper pigmented (*Shyava*), raised (*Utsedha*) lesions present in groups with rough texture (*Ruksha*) over the shin. *e*, Seborrhoeic keratosis: Black (*Krishna*), elevated (*Utsedha*), painless (*Aruk*) lesions over the back. Initially a small elevated nodule appeared which extended to other areas. Patient has associated burning sensation and pruritis. *a-e*, present with the same *Dosha vaishamyam*. However in allopathic dermatology they are regarded as different diseases requiring different treatments. Example tinea capitis responds to antifungals, seborrhoeic keratosis to chemical cauterization. In Ayurveda also dominant *Dosha* are different in these presentations. More studies are needed to delineate exact *Sthaneeya vikruthi* treatments of Ayurveda for similar appearing diseases.



Figure 23. Pruritic (*Kandu*), scaly (*Mathsya shakalopama*, arrow) lesion in the lower leg, which started as a hyperpigmented (*Krishna*) lesion. Lesion exacerbates in cold climate, suggestive of *Vatha* dominance. Lesion is dry (*Ruksha*), with scales and often patient pulled flakes from the lesion. Clinically, this lesion resembles *Kapha vatha* dominance, similar to allopathic lichen planus. Biopsy revealed features of chronic eczema. A careful history revealed occasional multiple vesicle formation and oozing (*Srava*). In dermatology, vesicle formation and oozing distinguish eczema from lichen planus. Bullous variant of lichen planus presents with large and fewer bullae. Therefore, for *Kapha vatha dosha vaishamyā*, chronic dry eczema, prurigo nodularis and lichen planus are the differential diagnosis. Eczema is comparable to *Vicharchika*, a *Kapha* dominant condition. Detailed history-taking is recommended for correct diagnosis in *Kapha vatha*-dominant condition.

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