Chapter 4
Religious Dermatoses

Nicole Trepanowski, Nicole Patzelt, and Neelam A. Vashi

Dermatologic complications can arise due to the events that take place in the practice of various religions. As the world is becoming more culturally diverse, it is important for dermatologists to be aware of religious dermatoses and how they might present. A knowledge and understanding of basic religious practices will help dermatologists better serve the needs of their patients as well as provide proper counseling and management to help treat these conditions. Without

N. Trepanowski
Boston University School of Medicine, Boston, MA, USA

N. Patzelt
Department of Dermatology, Boston Medical Center, Boston, MA, USA

N. A. Vashi (✉)
Boston University School of Medicine, Boston, MA, USA

Department of Dermatology, Boston Medical Center, Boston, MA, USA

Department of Dermatology, Boston University Center for Ethnic Skin, Boston, MA, USA

Boston University Cosmetic and Laser Center, Boston, MA, USA

Department of Veteran Affairs, Boston Health Care System, Boston, MA, USA

© The Author(s) 2021

N. A. Vashi (ed.), *Cultural Practices and Dermatoses*,
https://doi.org/10.1007/978-3-030-68992-6_4

exposure or background, dermatologists are unlikely to ask about the religious practices of their patients, and will thus lack important diagnostic information essential for the care and treatment of their patients.

In this chapter, we discuss several religious practices with dermatologic complications. We will be discussing the dermatoses associated with the following religions: Hinduism, Buddhism, Islam, Sikhism, Judaism, and Christianity. It is important to recognize that sometimes cultural and religious practices are intertwined. For example, we will discuss the use of betel quid in Buddhism that is also used for social purposes (breath refreshment). Thus, the following dermatoses may not be limited to only those that practice the religion that they are associated with.

The following conditions draw from published case reports and series on religious dermatologic complications. A lack of published data and formal studies on religious dermatoses limit conclusions regarding prevalence of these conditions.

This chapter is divided into different subsections based on the religion associated with each dermatologic condition. Information on the background, complications, and treatment of each religious dermatosis is provided. Table 4.1 includes a summary of various religious dermatoses, their associated religion(s), prevention, and treatment options.

Hinduism

Alta Dermatitis

Background

Hindu women use alta, a red dye, to color their feet during religious celebrations. Preparations of alta have been found to contain the azo dyes Crocein Scarlet MOO and Solvent Yellow 3, which form breakdown products that are toxic to melanocytes when exposed to the environment [1, 2].

Table 4.1 Summary of religious dermatoses

Religion of origin	Form of worship/ celebration	Mechanism/Definition	Dermatologic complications	Prevention	Treatment
Hinduism	Alta	Red dye applied to the feet during religious festivals, consisting of dyes that form melanocytotoxic metabolites [1, 2]	Allergic and irritant contact dermatitis and chemical leukoderma [2, 3]	Avoidance of exposure or switching to a chemical-free formulation	Depigmentation is rarely reversible [2]
Hinduism	Holi	Spring festival, participants throw colors on each other consisting of artificial dyes [4, 5]	Allergic contact dermatitis, urticaria, secondary pyoderma, xerosis, periorbital necrotizing fasciitis, conjunctival discoloration, temporary vision loss [4–8]	Avoidance of exposure	Short dose of topical corticosteroids [4, 6]

(continued)

Table 4.1 (continued)

Religion of origin	Form of worship/ celebration	Mechanism/Definition	Dermatologic complications	Prevention	Treatment
Hinduism, Islam	Kalava	Ritual thread tied tightly around the wrist during religious and cultural celebrations [9, 10]	Inflammation, foreign body granuloma, scar [9]	Tie the thread less tightly	Remove foreign body material, topical antibiotic, topical corticosteroids. Systemic corticosteroids if warranted [9]
Hinduism, Buddhism	Betel quid	Betel leaves, areca nut mixture chewed during religious ceremonies. Arecoline, arecaidine, elevated copper levels, fibroblast activation, fibrinogen degradation products, and excessive fibrin deposition may contribute to pathogenesis [11–16]	Oral submucous fibrosis, periodontal disease, dental caries, leukoplakia, lichenoid lesions, hyper and hyposalivation, oral squamous cell carcinoma, pharyngeal and esophageal carcinoma [14, 18–23]	Avoidance of exposure, educate patient on risks of use.	Antifibrotic compounds such as tanshinone IIA/salvianolic acid A/salvianolic acid B may treat oral submucous fibrosis but not yet tested in humans [13]

Islam, Buddhism	Prayer marks	Five daily prayers in various positions lasting 5–10 minutes each causing repetitive friction and pressure [24, 25]	Thickening, hyperpigmentation, lichenification, callus, and/or frictional melanosis on bridge of the nose, forehead, knees, ankles, and dorsa of the feet [24, 26, 27]	Incorporate soft prayer rugs and thick clothing over bony prominences, modify stances if possible [28]	May spontaneously regress, removal of nodules using surgical curettage after softening with 40% urea or topical keratolytics [28, 29]
Islam	Headscarves	Religious attire wrapped around the head and upper torso and secured with plastic or metal safety pins [32]	Vitiligo, depigmentation, and/or lichen simplex chronicus [32]	Change method and location of securing the scarf [32].	Change method and location of securing the scarf [32]

(continued)

Table 4.1 (continued)

Religion of origin	Form of worship/ celebration	Mechanism/Definition	Dermatologic complications	Prevention	Treatment
Islam	Orf	Sacrifice of infected sheep or goats for the Feast of Sacrifice results in animal-human transmission of Orf [33–35]	Phlegmonous or ulceratovegative lesions, and/or cellulitis, generally on the hands [35]	Education on prevention of viral transmission, encourage glove usage and hand washing [35]	Often spontaneously remits, topical antibiotic, systemic antibiotic, or surgical excision if necessary [36]
Sikhism	Turban ear	Sikh men tie their long hair into a tight knot and wrap a turban around it. They also tie their beards into a tight knot. Both of these techniques cause excessive pressure on the ears [37–39]	Perichondritis, chondrodermatitis nodularis helicis, hyperpigmentation, nodules, and/or ulceration on the ears [40, 41]	Wrap the hair less tightly, wear the hair loose, and/ or remove the turban at night [37–39, 41]	Topical and intralesional steroids, topical 2% glycerol trinitrate, CO2 laser, surgical excision of the cartilage, and curettage [41]

Sikhism	Traction alopecia	Sikh men tie their long hair into a tight knot and wrap a turban around it. They also tie their beards into a tight knot. Both of these techniques cause excessive pressure on the hair follicles [37–39]	Traction alopecia on the sides of the mandible and the frontoparietal scalp, scarring alopecia [37–39]	Wrap the hair less tightly, wear the hair loose, and/or remove the turban at night [37–39, 41]	Restorative hair transplantation [38]
Judaism	Davener's dermatosis	Jewish prayer method involving repetitive swaying leading to constant friction and damage of the stratum corneum and melanocyte stimulation [42, 43]	Asymptomatic elongated, longitudinal, hyperpigmented patches overlying the inferior thoracic and superior lumbar vertebrae [42]	Avoidance of exposure, wearing thick, protective clothing over the exposed area, and covering the back of the chair with protective material	Chemical peels, lightening creams, erbium-doped fractional photothermolysis, and Q- switched lasers [43]

(continued)

Table 4.1 (continued)

Religion of origin	Form of worship/ celebration	Mechanism/Definition	Dermatologic complications	Prevention	Treatment
Judaism	Phylactery dermatitis	A religious ornament that is wrapped around the forehead and secured with leather straps that fall onto the neck and anterior waist. Another ornament is wrapped around the left upper arm with leather straps that trail to the fingers. Allergens on the straps are believed to be the cause of the allergic contact dermatitis [44–48]	Allergic contact dermatitis [44–48]	Wrap the phylactery in plastic wrap to avoid skin contact with the potential allergens, avoid wearing the phylactery, or use alternate allergen-free versions when possible [47]	Mid-potency corticosteroids and antihistamines [47]

Christianity	Pew blisters	Christians kneel on pews for extended periods of time during church services and other times of worship, causing extended periods of friction [49]	Blisters, bullae, and/or calluses [50, 51]	Avoidance of kneeling, wearing thick protective clothing over exposed areas, placing a soft rug or mat on the pew to reduce pressure [50]	Avoidance of kneeling, wearing thick protective clothing over exposed areas, placing a soft rug or mat on the pew to reduce pressure [50]
Christianity	Holy week hypertrich-osis	*Costaleros* in Spain carry statues on their shoulders during the holy week and practice throughout the year, causing extended friction [52]	Hypertrichosis overlying a firm mass [53]	Cessation of weight-bearing on affected area [53]	Cessation of weight-bearing on affected area [53]

Complications

Adverse events associated with the use of alta include allergic and irritant contact dermatitis and chemical leukoderma on the sides of the feet and toes and dorsa of the feet. Patients may initially present with hyperpigmentation, pruritus, and scaling on the affected areas [3]. Continued use of alta can lead to depigmentation of affected areas [2].

Treatment

The treatment of alta dermatitis proves difficult as it is generally non-reversible [2]. Cessation of the use of alta or switching to a chemical-free or alternate formulation may help prevent further damage.

Holi Dermatoses

Background

Holi is a religious festival that occurs in the Spring where participants celebrate a year of fertility and harvest. Participants throw colored pastes, dyes, watercolors, and powders on family, friends, and strangers at large gatherings [4]. Traditionally practiced in India, Holi has now become a popular celebration on American college campuses. It is important to recognize that non-Hindus also participate in the festivities, and may present with Holi-associated dermatoses.

In the past, the dyes used for Holi were traditionally prepared from flowers and trees thought to have Ayurvedic medicinal properties. Now, commercially produced dyes are commonly used, including copper sulfate and malachite green (green), mercury sulfate (red), cobalt nitrate, Prussian blue, indigo/zinc salts (blue), aluminum bromide (silver), and zinc oxide (black) [4, 5]. To produce a glittering effect, silica, mica, and asbestos dust are often added to the preparations [4].

Complications

In the weeks following the Holi festivities, an annual increase in allergic contact dermatitis and other dermatoses has been observed in festival participants. Patients may present with pruritus, oozing, pain, burning, and scaling. Lesions on exposed areas such as the face, dorsum of the hands, palmar surface of the hands, forearms, arms, trunk, and scalp can be erythematous, urticarial, eczematous, and xerotic. The nail folds may become acutely inflamed, and secondary infections may also occur. In areas where liquid dyes pool, severe lesions can develop. Preexisting dermatologic conditions such as acne, chronic paronychia, and eczema may become acutely exacerbated [4, 5]. Ocular complications include conjunctival discoloration, erythema, pain, watering, itching, temporary vision loss, periorbital necrotizing fasciitis, and grittiness [5–8].

Treatment

These conditions, termed "Holi dermatoses", typically respond well to a short dose of topical corticosteroid [4, 6].

Kalava Induced Foreign Body Granuloma

Background

Kalava, also known as kalawa or kautuka, is a sacred ritual thread tied around the wrist during Hindu and Muslim religious and cultural celebrations [9, 10]. Men, women, and children wear the kalava for different ceremonies.

Complications

Tightly tied kalava has caused complications in children. Because of religious beliefs, parents may not immediately untie the thread. In these circumstances, inflammation and

pain develop on the affected area in the following weeks. On occasion, the threads of kalava have penetrated the injury site leading to the formation of foreign body granuloma [9]. The inflammation associated with kalava typically resolves within 2 weeks, but severe cases can lead to scar formation [9].

Treatment

Treatment includes removal of any foreign body material, a topical antibiotic, and a topical corticosteroid. Systemic corticosteroids may be given if warranted [9].

Buddhism

Betel Quid

Background

Betel quid is a combination of betel leaves and areca nuts originally employed as a religious offering in Hindu and Buddhist ceremonies. Betel quid now often contains fillers/flavorings including tobacco and other spices. The use of betel quid is no longer constrained to religious offerings as now people of various religious backgrounds use betel quid because of its stimulant, breath-refreshing, and anti-helminthic properties [11, 12].

Complications

Chewing betel quid can lead to oral submucosal fibrosis, a chronic and precancerous lesion of the oral mucosa. The pathogenesis of oral submucosal fibrosis attributed to betel quid is thought to be due to the release of the compounds arecoline and arecaidine [13]. In addition, elevated copper levels, fibroblast activation, fibrinogen degradation products, and excessive fibrin deposition may also contribute to its

pathogenesis [14–16]. Patients may present with difficulty opening their mouth and describe a burning sensation. The oral mucosa may be covered with white, fibrous bands [13]. The risk of oral submucosal fibrosis increases with frequency of use as well as duration [17]. Discoloration of dental and oral mucosa, oral leukoplakia, periodontal disease, dental caries, lichenoid lesions, and hyper- and hyposalivation are other complications associated with the use of betel quid [18–21]. One study found that 11.7% of betel quid users had oral leukoplakia and 6.1% had oral submucous fibrosis [18]. The prolonged chemical and mechanical irritation associated with the use of betel quid may transform this condition into oral squamous cell cancer at a rate of 3–19% [14]. Other cancers associated with the use of betel quid include pharyngeal and esophageal cancers. The concurrent use of tobacco products and alcohol consumption raises an individual's risk for these cancers [22, 23].

Treatment

Antifibrotic compounds such as tanshinone IIA/salvianolic acid A/salvianolic acid B may treat oral submucous fibrosis but not yet tested in humans [13]. Educating the patient on the risks of chewing betel quid is imperative to prevent the development of cancer attributed to betel quid.

Islam

Prayer Marks

Background

The second pillar of Islam is called Salat. Salat consists of a series of prayer positions called Waquf (standing), Ruku (bowing), Sajda (prostration), and Julus (sitting), each lasting between 5 and 10 minutes [24]. Salat is a ritual that should be performed five times daily by all Muslims in normal circum-

stances [25]. An individual may wash their hands prior to each prayer.

Complications

The prayer method utilized in the practice of Islam can lead to the development of prayer marks, also known as prayer nodules or prayer hyperpigmentation. Individuals develop asymptomatic skin changes on bony prominences such as the forehead, bridge of the nose, knees, ankles, and dorsa of the feet due to the repetitive pressure from the prayer stances. These asymptomatic skin changes can include hyperpigmentation, thickening, and lichenification [24, 26, 27]. The prayer marks are initially mobile, smooth, and soft, but can develop into a callus [24]. The forehead may develop frictional melanosis. Hand dermatitis may occur due to the frequent handwashing that occurs with each set of prayers.

Prayer marks are most commonly found on the knees and feet bilaterally. The left foot is often frequently involved due to the posture during the Julus (sitting) stance. The incidence of prayer marks increases with age; the lowest incidence is among those 20–25 years of age, and the highest incidence is among those 50 and older. Females are less likely to develop prayer marks than men, and their prayer markers are often less severe. This is postulated to be due to the fact that females have more subcutaneous tissue protecting their bony prominences, spend less time practicing Salat, and have less sun exposure [24].

Prayer marks are not limited to the practice of Islam. They have also been reported on the lateral malleoli of a Buddhist monk who meditated cross-legged for several consecutive days [28].

The development of prayer marks in unusual locations may provide additional information regarding a patient's systemic health [29, 30]. For example, Cangiano et al. described a patient experiencing worsening shortness of breath due to his chronic obstructive pulmonary disease.

Additional questioning revealed that the patient developed prayer marks on his elbows (an unusual site for prayer marks) because of his need to maneuver himself in a different manner to perform his prayer rituals due to his worsening shortness of breath [30].

Treatment

In individuals who are no longer able to pray regularly, prayer marks have regressed on their own [31]. Nodules may be treated surgically, with topicals such as 40% urea, curettage, or other keratolytics [28]. Patients may modify their positioning during prayer stances, wear thick clothing covering their bony prominences, or incorporate a prayer rug into their practice [28].

Headscarf Use

Background

Headscarves are a common religious garment worn by Muslim women that cover the head, scalp, and upper torso. Metal or plastic safety pins are often used to secure the scarf in place over the center of the neck, specifically in the area of the thyroid cartilage [32].

Complications

Some Muslim women have presented with vitiligo and depigmentation over the region where they had been securing their headscarves with safety pins [32]. This melanocyte loss has been attributed to chronic pressure, minor mechanical trauma, and repeated friction from the safety pins [32]. Lichen simplex chronicus has also been associated with headscarf use [32].

Treatment

The recommended treatment involves changing the method and location of securing the scarf [32].

Orf

Background

The Muslim Feast of Sacrifice, also known as Eid-al-Adha or Eid-al-Kebir, is a religious celebration that occurs annually 2 months and 10 days after the end of Ramadan. Each Muslim family kills a lamb or sheep during this feast, and the animal is bled alive as a part of the ritual [33–35]. This method results in close contact with the animal, facilitating the transmission of virus from sheep to humans [33]. Specifically, Orf, also known as ecthyma contagiosum, is a cutaneous infection caused by a poxvirus that is transmitted to humans via contact with infected sheep and goats [34].

Complications

Infections with Orf following the observance of the Muslim Feast of Sacrifice typically occur in the days to weeks following the religious observance [33]. Orf causes infection by entering through skin lesions, often caused by knife handling during the slaughter, or pre-existing skin lesions [35]. Orf most commonly causes lesions on the hands [35]. Patients may present with fever, malaise, phlegmonous lesions, ulceratovegetative lesions, and cellulitis [35]. The skin lesions associated with Orf virus infection are often polymorphous and may consist of vesicles, blisters, pustules, erosions, ulcers, papules, and nodules [36]. Patients may present with a single lesion or multiple lesions [35]. Only men are traditionally allowed to sacrifice the sheep, but infections have been noted in women or children who had contact with the skin and meat of the animal [33, 35]. Infection can be detected using PCR, viral culture, or EM [35].

Treatment

Orf spontaneously remits within 6 weeks, but lingering pain, bacterial superinfections, and regional lymphadenitis are possible complications [36]. Treatment includes the application of topical antiseptics and prophylactic systemic antibiotics if deemed necessary [36]. Treatment of Orf may also require surgical excision [35]. It is important to educate patients on the potential for virus transmission and methods to avoid infection [35]. Patients that will handle animals for the Feast of Sacrifice should be encouraged to wear gloves, avoid exposure to open skin wounds, and wash hands thoroughly with soap and water after contacting animals [35].

Sikhism

Turban Ear

Background

A turban is a form of head attire that consists of a long piece of cloth tightly wrapped around the head. The original holy gurus of Sikhism were given a turban to disguise their uncut hair. Men and women who practice Sikhism follow this tradition and do not cut their hair as a symbol of religious devotion. Men tie their hair into a tight knot on the frontal scalp with a handkerchief or 'guti' placed on top of the knot before covering the hair with a turban for lengthy periods of time [37, 38]. Men also tie their beard hair into a tight knot [37, 39].

Complications

Turban use can lead to the development of turban ear, which consists of lesions on the ears ranging from perichondritis to chondrodermatitis nodularis helicis attributed to prolonged pressure and trauma [40, 41]. Patients may present with a

range of symptoms varying from non-bothersome tenderness to intense pain exacerbated when sleeping [40, 41]. Hyperpigmentation, notable skin markings, firm erythematous nodules, and ultimately ulceration have been noted on the bilateral tragi and antihelices [40, 41].

Treatment

Treatment of turban ear includes reducing the pressure on the ears caused by the turban [37–39, 41]. A physician can recommend that the patient wrap the hair less tightly, wear the hair loose, or remove the turban at night. Topical and intralesional steroids, topical 2% glycerol trinitrate, CO_2 laser, surgical excision of the cartilage, and curettage may be employed to treat the secondary skin changes associated with turban use [41].

Traction Alopecia from Turban Use

Background

As discussed in the previous section, male Sikhs wear turbans tightly wrapped around their heads and refrain from cutting their hair as a form of religious devotion.

Complications

The tightly wrapped hair beneath Sikh turbans and tightly wound beard hair causes prolonged mechanical stress on the hair follicles, leading to traction alopecia in some instances. The location of the traction alopecia is generally along the sides of the mandible and the frontoparietal scalp [37–39]. Traction alopecia is considered reversible, but it may result in scarring if left untreated.

Treatment

Treatment for traction alopecia involves reducing the physical stress on the hair follicles [37–39, 41]. Similar to the treatment for turban ear, patients should be encouraged to tie their hair less tightly and wear their hair turban-free whenever possible. If the condition progresses to scarring alopecia, the only definitive treatment is restorative hair transplantation [38].

Judaism

Davener's Dermatosis

Background

Davening is a Jewish prayer method where young male Jewish students discuss, recite texts, and pray from the Torah in Orthodox Jewish Talmudic seminaries, also known as Yeshivas. These students spend hours swaying their upper chests back and forth in a rhythmic motion against a rigid backboard, symbolizing a flickering candle flame. The students are generally seated in hard chairs made of wood or metal [42].

Complications

Davener's dermatosis is a frictional melanosis [42]. The prolonged friction during lengthy prayer sessions is thought to stimulate melanocyte division while damaging the stratum corneum, reducing function of deeper keratinocytes and melanocytes. Melanin is thus lost into the papillary dermis [43].

Patients are generally asymptomatic and unaware of their lesions which may be discovered on routine skin exam over-

lying the spinal processes of the inferior thoracic and superior lumbar vertebrae [42]. The lesions consist of elongated, longitudinal, hyperpigmented patches. Lesions may be mild and consist of a cobblestoned appearance of 'islands' of minimal hyperpigmentation with inconclusive borders. Severe lesions can take a continuous appearance with heavier pigmentation, well-defined borders, and mild induration [42].

Treatment

Treatment includes avoiding the physical stressor, wearing thick protective clothing over the affected area when participating in Davening, or covering the back of the chair with material to reduce the friction. To treat the hyperpigmentation, chemical peels, lightening creams, erbium-doped fractional photothermolysis, and Q-switched lasers may be employed [43].

Phylactery Dermatitis

Background

A phylactery, also termed tefillin, is a religious ornament donned by Jewish men during their non-holiday, weekday, morning prayers. A phylactery has two components. A box containing parchment with biblical script is wrapped around the forehead and secured with leather straps around the head that fall onto the neck and anterior waist. Another box is wrapped around the left upper arm with leather straps that trail down the arms to the fingers [44, 45].

Complications

Wearing a phylactery has been associated with the development of allergic contact dermatitis. Patients may present with erythematous, pruritic eruptions in a spiral pattern on the

posterior neck and down the left arm [44]. Ethyl acrylate 0.1%, potassium dichromate, methyl methyl-methacrylate 2%, formaldehyde, *p*-tertiary butylphenol formaldehyde resin 1%, colophonium, and *p*-phenylenediamine 1% are allergens that have been implicated [44–48].

Treatment

Patients should be encouraged to wrap their phylactery in plastic wrap to avoid skin contact with the potential allergens, avoid wearing the phylactery, or use alternate allergen-free versions. Treatment of the allergic contact dermatitis may include mid-potency corticosteroids and antihistamines [47].

Christianity

Pew Blisters

Background

Christians kneel on pews during church services as an expression of worship, humility, and submission [49]. Christians may attend church services weekly or more frequently if attending a parochial school or for other devotional purposes. Church services tend to last between 1 and 2 hours, with the amount of time spent kneeling differing on the specific service as well as the particular sect of Christianity.

Complications

Pew blisters, also referred to as prayer blisters, is a frictional dermatoses seen among Christians. Bullae and/or calluses may develop on the bilateral knees after repetitive and frequent kneeling during church services. In particular, pew blisters have been associated with the Roman Catholic sect of Christianity [50, 51].

Treatment

Similar to other frictional dermatoses mentioned in this chapter, a physician may recommend stopping or reducing the repetitive motion of kneeling, wearing special protective clothing on exposed areas, or placing a soft rug or mat on the pew to reduce friction [50].

Holy Week Hypertrichosis

Background

Semana Santa, or Holy Week, is a weeklong celebration that occurs in Spain annually from Palm Sunday to Easter Sunday. Throughout the week, *costaleros* carry large statues (*pasos*) through the streets of Spain in a series of processions to celebrate the passion of Christ. The long beam of the *pasos* is carried on the shoulders of the *costaleros* for many hours. There are between 20 and 40 *costaleros* per float. The *costaleros* practice throughout the year to ensure a smooth procession. They practice with the *paso* itself as well as lift weights to prepare their bodies [52].

Complications

Holy week hypertrichosis is a friction dermatosis consisting of hypertrichosis on the inferior, posterior neck of the *costaleros* who carry *pasos* during Semana Santa [53]. Patients may have a 'costal', which is a hard, oval, mobile, subcutaneous mass with coarse, long hair emerging from the mass [53]. It is believed that the repeated year-long repetitive friction results in inflammation and hair growth [53].

Treatment

Treatment may involve recommendation of cessation of weight bearing exercises on the affected region [53].

Conclusion

In this chapter we discuss various dermatoses associated with the practice of different religions. As the world is becoming a more diverse place, it is important for physicians to be aware of the various cultural practices of their patients to provide them with the best treatment. Many of these religious dermatoses are only diagnosed when taking a thorough patient history, as their presentation can be similar to general dermatoses. Therefore, it is important for physicians to inquire about daily repetitive practices, holiday celebrations, and recent exposures.

Patients may be unaware that their religious practice is causing their dermatologic lesion, or they are aware and seeking reassurance, or the patient is aware and unbothered by their lesion. As some of these dermatoses are caused by important practices critical to their religion, patients may be unwilling to change their inciting behavior. It is important for the physician to work with the patient to discover the best individual treatment plan for that patient. Depending on patient willingness to change, different clothes, prayer rugs, dyes, hair/scarf tying techniques, among others, are to be encouraged.

References

1. Bajaj AK, Saraswat A, Srivastav PK. Chemical leucoderma: Indian scenario, prognosis, and treatment. Indian J Dermatol. 2010;55:250–4.
2. Ghosh SK, Bandyopadhyay D. Chemical leukoderma induced by colored strings. J Am Acad Dermatol. 2009;61:909–10.
3. Bajaj AK, Pandey RK, Misra K, Chatterji AK, Tiwari A, Basu S. Contact depigmentation caused by an azo dye in alta. Contact Dermatitis. 1998;38:189–93.
4. Ghosh SK, Bandyopadhyay D, Chatterjee G, Saha D. The 'holi' dermatoses: annual spate of skin diseases following the spring festival in India. Indian J Dermatol. 2009;54:240–2.

5. Ghosh SK, Bandyopadhyay D, Verma SB. Cultural practice and dermatology: the "Holi" dermatoses. Int J Dermatol. 2012;51:1385–7.
6. Gupta D, Thappa DM. Dermatoses due to Indian cultural practices. Indian J Dermatol. 2015;60:3–12.
7. Chauhan D, Arora R, Das S, Shroff D, Narula R. Bilateral periorbital necrotizing fasciitis following exposure to Holi colors: a case report. Indian J Ophthalmol. 2007;55:373–4.
8. Velpandian T, Saha K, Ravi AK, Kumari SS, Biswas NR, Ghose S. Ocular hazards of the colors used during the festival-of-colors (Holi) in India—malachite green toxicity. J Hazard Mater. 2007;139:204–8.
9. Misri R, Jakhar D, Gupta R, Kumar S. Kalava induced foreign body reaction. J Am Acad Dermatol. 2019;80:e9–e10.
10. Gupta L. Growing up Hindu and Muslim: how early does it happen? Econ Polit Wkly. 2008;43:35–41.
11. Chatterjee R, Gupta B, Bose S. Oral screening for pre-cancerous lesions among areca-nut chewing population from rural India. Oral Health Prev Dent. 2015;13:509–14.
12. Prabhu RV, Prabhu V, Chatra L, Shenai P, Suvarna N, Dandekeri S. Areca nut and its role in oral submucous fibrosis. J Clin Exp Dent. 2014;6:569–75.
13. Kiran G, Muni Sekhar M, Hunasgi S, Ahmed SA, Suri C, Krishna A. Plasma fibrinogen degradation products in betel nut chewers – with and without oral submucous fibrosis. J Oral Maxillofac Pathol. 2013;17:324–8.
14. Mathew P, Austin RD, Varghese SS, Manojkumar. Estimation and comparison of copper content in raw areca nuts and commercial areca nut products: implications in increasing prevalence of oral submucous fibrosis (OSMF). J Clin Diagn Res. 2014;8:247–9.
15. Mohammed F, Manohar V, Jose M, et al. Estimation of copper in saliva and areca nut products and its correlation with histological grades of oral submucous fibrosis. J Oral Pathol Med. 2015;44:208–13.
16. Khan I, Pant I, Narra S, et al. Epithelial atrophy in oral submucous fibrosis is mediated by copper (II) and arecoline of areca nut. J Cell Mol Med. 2015;19:2397–412.
17. Hosein M, Mohiuddin S, Fatima N. Association between grading of oral submucous fibrosis with frequency and consumption of areca nut and its derivatives in a wide age group: a multi-centric cross sectional study from Karachi, Pakistan. J Cancer Prev. 2015;20:216–22.

18. Prasad S, Anand R, Dhingra C. Betel nut chewing behavior and its association with oral mucosal lesions and conditions in Ghaziabad, India. Oral Health Prev Dent. 2014;12:241–8.
19. Anand R, Dhingra C, Prasad S, Menon I. Betel nut chewing and its deleterious effects on oral cavity. J Cancer Res Ther. 2014;10:499–505.
20. Yanduri S, Kumar VB, Suma S, Madhura MG. Lichenoid features and fibrosis: coexistence in quid-induced oral lesions. J Contemp Dent Pract. 2015;16:389–93.
21. Abdul Khader NF, Dyasanoor S. Assessment of salivary flow rate and pH among areca nut chewers and oral submucous fibrosis subjects: a comparative study. J Cancer Prev. 2015;20:208–15.
22. Moss J, Kawamoto C, Pokhrel P, Paulino Y, Herzog T. Developing a betel quid cessation program on the island of Guam. Pac Asia Inq. 2015;6:144–50.
23. Liu B, Shen M, Xiong J, et al. Synergistic effects of betel quid chewing, tobacco use (in the form of cigarette smoking), and alcohol consumption on the risk of malignant transformation of oral submucous fibrosis (OSF): a case-control study in Hunan Province, China. Oral Surg Oral Med Oral Pathol Oral Radiol. 2015;120:337–45.
24. Abanmi AA, Al Zouman AY, Alhussaini H, Al-Asmari A. Prayer marks. Int J Dermatol. 2002;41:411–4.
25. Bowen J. Salat in Indonesia: the social meanings of an Islamic ritual. Man (NS). 1989;24:600–19.
26. Barankin B. Prayer marks. Int J Dermatol. 2004;43:985–6.
27. Orenay OM, Sarifakioglu E. Prayer mark on the forehead: hyperpigmentation. Ann Dermatol. 2015;27:107–8.
28. ur Rehman H, Asfour NA. Clinical images: prayer nodules. CMAJ. 2010;182:19.
29. Sharma V, Sharma A, Aggarwal S. Prayer-marks heralding acute coronary syndrome. J Health Popul Nutr. 2011;29:660.
30. Cangiano M, Chisti MJ, Pietroni MA, Smith JH. Extending prayer marks as a sign of worsening chronic disease. J Health Popul Nutr. 2011;29:290–1.
31. Mishriki YY. Skin commotion from repetitive devotion. Prayer callus. Postgrad Med. 1999;105:153–4.
32. El-Din Anbar T, Abdel-Rahman AT, El-Khayyat MA, El-Azhary AE. Vitiligo on anterior aspect of neck in Muslim females: case series. Int J Dermatol. 2008;47:178–9.
33. Ghislain PD, Dinet Y, Delescluse J. Orf contamination may occur during religious events. J Am Acad Dermatol. 2000;42:848.

34. Malik M, Bharier M, Tahan S. Orf acquired during religious observance. Arch Dermatol. 2009;145:606–8.
35. Nougairede A, Fossati C, Salez N, Cohen-Bacrie S, Ninove L, Michel F, Aboukais S, Buttner M, Zandotti C, de Lamballerie X, Charrel RN. Sheep-to-human transmission of Orf virus during eid al-adha religious practices, France. Emerg Infect Dis. 2013;19:102–5.
36. Veraldi S, Nazzaro G, Varia F, Cuka E. Presentation of orf (ecthyma contagiosum) after sheep slaughtering for religious feasts. Infection. 2014;42:767–9.
37. James J, Saladi RN, Fox JL. Traction alopecia in Sikh male patients. J Am Board Fam Med. 2007;20:497–8.
38. Karimaian-Teherani D, El Shabrawi-Caelen L, Tanew A. Traction alopecia in two adolescent Sikh brothers-an under-recognized problem unmasked by migration. Pediatr Dermatol. 2011;28:336–8.
39. Kanwar AJ, Kaur S, Basak P, Sharma R. Traction alopecia in Sikh males. Arch Dermatol. 1989;125:1587.
40. Williams HC. Turban ear. Arch Dermatol. 1994;130:117–9.
41. Mansouri Y, Orpin SD. Are these real turban tumours? Clin Exp Dermatol. 2013;38:424–5.
42. Naimer SA, Trattner A, Biton A, Avinoach I, Vardy D. Davener's dermatosis: a variant of friction hypermelanosis. J Am Acad Dermatol. 2000;42:442–5.
43. Cho S, Lee SJ, Lee JH, Cho SB. Treatment of Davener's dermatosis using a 1064-nm Q-switched Nd:YAG laser with low fluence. Int J Dermatol. 2012;51:1394–6.
44. Gilead L, Vardy DA, Schamroth J. Tefillin dermatitis (a phylacteric phenomenon). J Am Acad Dermatol. 1995;32:812–3.
45. Trattner A, David M. Tefillin dermatitis. J Am Acad Dermatol. 2005;52:831–3.
46. Friedmann AC, Goldsmith P. Tefillin contact dermatitis: a problem in the devout. Contact Dermatitis. 2008;59:188–9.
47. Feit NE, Weinberg JM, DeLeo VA. Cutaneous disease and religious practice: case of allergic contact dermatitis to tefillin and review of the literature. Int J Dermatol. 2004;43:886–8.
48. Ross B, Brancaccio RR. Allergic contact dermatitis to tefillin. J Am Acad Dermatol. 1996;34:152–3.
49. Goldammer KMA. Religious symbolism and iconography. Britannica Website. 2010.
50. Goodheart HP. "Devotional dermatoses": a new nosologic entity? J Am Acad Dermatol. 2001;44:543.

51. Sanchez MR. Cutaneous diseases in Latinos. Dermatol Clin. 2003;21:689–97.
52. Lopez EA. Modern Spain. ABC-CLIO, LLC: Santa Barbara; 2016.
53. Camacho F. Acquired circumscribed hypertrichosis in the 'costaleros' who bear the 'pasos' during Holy Week in Seville, Spain. Arch Dermatol. 1995;131:361–3.