

Allergic Contact Dermatitis due to Lac Bangles: A Rare Presentation

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ABSTRACT

Background: Allergic contact dermatitis (ACD) is a common skin problem induced by exposure to an allergen to which the skin is susceptible. Although lac-bangles, a type of traditional jewellery composed of lac resin and worn for ages in India, have been linked to a small number of ACD cases, they do exist.

Case: We describe a 24-year-old female who, after wearing brand-new lac bangles non-stop for two days, developed ACD. The diagnosis of allergic contact dermatitis caused by lac-bangles was made based on the clinical presentation and medical history. The patient was asked to take off the bangles and was given oral antihistamines and topical steroid creams as treatments.

Conclusion: Lac-bangle allergy is treated using topical steroids, antihistamines, and removal of the offending agent in order to alleviate skin irritation. Individuals with a history of skin allergies or past sensitivity to lac bangles should avoid wearing them.

Keywords: Allergic contact dermatitis; Hypersensitivity; Lac

INTRODUCTION

ACD is a common skin ailment that happens when the skin comes into contact with an allergen to which it is sensitive. Lac-Bangles, a famous traditional jewellery item in India, are formed of lac resin, which is obtained from the secretions of insects. Despite their extensive use, there aren't many cases of Lac Bangles causing allergic contact dermatitis. This case report depicts a patient with allergic contact dermatitis caused by Lac Bangles.

CASE

A 24-year-old woman complained of itchiness, redness, and swelling on her wrists and forearms that had been going on for two days. Her new lac bangles, which she had been wearing nonstop for two days, were something she had just lately purchased. She had no prior history of atopic dermatitis or skin sensitivities.

Examination revealed an erythematous, papular rash, edema, and vesicles on the patient's wrists and forearms. Only the places that came into contact with the bangles had the rash as seen in [Figure 1](#) and [Figure 2](#). On the other parts

of the body, there were no skin lesions.

The clinical presentation and medical history led to the diagnosis of allergic contact dermatitis brought on by lac bangles. The patient denied undergoing any patch tests.

Treatment

It was suggested to the patient that she take the bangles off and not wear them again. She was provided a topical steroid cream (0.02% Halobestol propionate with 2% fusidic acid) to apply twice a day for 7 days. In order to stop the itching, she was also instructed to take an oral antihistamine (desloratadine 10 mg) at night.

After three days of treatment, the patient reported a considerable reduction in her symptoms. Both the redness and the itching had disappeared. The patient was instructed to use the topical steroid cream for a further four days and then visit in a week for a follow-up.



Figure 1: Vesicular rash, erythema on the anterior aspect of forearm that was in contact with the allergen.



Figure 2: Vesicular rash, erythema on the posterior aspect of forearm that was in contact with the allergen.

DISCUSSION

An allergen coming into contact with the skin can cause allergic contact dermatitis (ACD), a type IV delayed hypersensitivity reaction. Erythema, oedema, vesiculation, and pruritus are all characteristics of ACD's clinical presentation. The history, clinical examination, and patch testing with a standardized panel of allergens are used to make the diagnosis. The therapy of ACD requires the avoidance of the offending substance, topical corticosteroids, and emollients.

A prevalent illness, allergic contact dermatitis affects up to 1 in 5 persons^[1]. The most common allergens implicated in ACD include nickel, cosmetic substances and preservatives^[2]. However, ACD caused by traditional practises is becoming more prevalent in India, notably in females^[3]. In India, lac bangles are a common type of jewellery. Lac resin, which comes from the insect secretions of the *Kerria lacca*, is used to make lac bangles^[4]. When resin and pigments are combined, complex patterns can be created. Lac bangles are popular among ladies, particularly during celebratory occasions such as weddings and religious rituals.

Lac bangles contain several allergens, including lac resin, pigment, and other materials. The exact processes of sensitization to these allergens are not well understood, but it is hypothesised that frequent exposure to the skin might generate an immunological response, leading to ACD. The clinical presentation of ACD due to lac bangles is similar to other kinds of ACD, with erythematous, pruritic, and vesicular lesions on the skin, notably on the forearm wrist and hands. Avoiding the offending agent and applying corticosteroids and emollients topically are the main components of the management of ACD brought on by lac bangles. Patients should be advised to avoid using lac bangles and other traditional cosmetics that contain lac resin. Hand hygiene techniques, such as avoiding frequent hand washing and wearing gloves when conducting domestic activities, can also assist to limit the risk of exposure. Patients who come with allergic dermatitis should be evaluated for ACD caused by lac bangles, especially if they have a history of exposure to conventional lac jewellery. Early diagnosis and avoidance of the offending agent are critical in the management of ACD. Patch testing with the relevant allergens, such as pigments and lac resin, is a helpful method for determining the cause.

CONCLUSION

Lac bangle allergic contact dermatitis is a rare but possible cause of skin irritation in people who wear these types of jewellery. Symptoms can be resolved with prompt identification and removal of the offending substance, as well as with the proper application of topical steroids and antihistamines. If a patient has a history of skin allergies or has previously had a response to lac bangles, they should be recommended to refrain from wearing them.

Highlights:

Some people who are sensitive to lac resin may get allergic contact dermatitis from wearing lac bangles, a common type of traditional jewellery in India.

The diagnosis of ACD caused by lac bangles is based on clinical presentation and medical history. The offending agent must be removed, and topical steroids and antihistamines must be used to treat the symptoms.

To prevent ACD, anyone with a history of skin allergies or lac sensitivity should be advised to stay away from wearing them.

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