

Management of Allergy by Jewellery and Piercing through Ayurveda

Type: Research Article

Received: October 22, 2024

Published: November 29, 2024

Citation:

Abhishek Singh., et al. "Management of Allergy by Jewellery and Piercing through Ayurveda". PriMera Scientific Medicine and Public Health 5.6 (2024): 50-53.

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Abstract

Jewelry and body piercings are widely practiced cultural and fashion expressions, particularly in areas such as the ears, nose, and eyebrows. However, a significant number of individuals experience adverse reactions, including inflammation and persistent discomfort, commonly referred to as jewelry allergies. These allergic reactions are frequently triggered by exposure to metals like nickel, cobalt, and chromium, known allergens that can induce skin sensitivity. Ayurveda, an ancient Indian system of medicine, offers a holistic approach for managing such allergies. Ayurvedic treatment emphasizes the use of herbal remedies, dietary adjustments, and topical applications to alleviate inflammation and promote tissue repair. Commonly employed herbs such as *Azadirachta indica* (Neem), *Curcuma longa* (Turmeric), and *Aloe barbadensis* (Aloe Vera) are renowned for their anti-inflammatory, antimicrobial, and skin-soothing properties. Furthermore, Ayurveda advocates the use of hypoallergenic metals like gold and silver, which are traditionally recognized for their therapeutic benefits, to prevent allergic reactions.

This paper explores Ayurvedic strategies for managing jewelry-related allergies and complications arising from body piercings. It examines the therapeutic efficacy of natural remedies, preventative approaches, and the role of lifestyle and dietary interventions. The integration of Ayurvedic principles with modern insights into allergic responses offers a comprehensive framework for the effective management of jewelry-induced allergies and complications.

Introduction

Jewelleries are treasured all over the universe. Allergic reactions and complications resulting from jewelry and body piercings are common dermatological issues, particularly in sensitive areas such as the ears, nose, and eyebrows. These reactions are primarily attributed to allergens such as nickel [1], cobalt, and chromium, which are commonly used in various types of jewelry. Symptoms of jewelry-related allergies include redness, itching, swelling, and blistering at the site of the piercing. While contemporary medical treatments focus on symptom management through the use of antihistamines and corticosteroids, Ayurvedic medicine offers a more holistic approach that targets the underlying causes of allergic responses. In Ayurvedic theory [2], these reactions are classified under doshic imbalances, particularly of Pitta and Kapha, are addressed through dietary modifications, herbal [3] treatments, and lifestyle interventions aimed at restoring balance.

Causes of Jewelry Allergy According to Ayurveda

In Ayurvedic understanding, allergic reactions are caused by an imbalance of the three doshas—Vata, Pitta, and Kapha. of these, Pitta is primarily responsible for skin-related issues, such as inflammation, rashes, and itching. Pitta governs heat and metabolism, and an excess leads to hypersensitivity of the skin, making it more reactive to external irritants like metals. Jewelry allergies are commonly triggered by allergenic metals like nickel, cobalt, and chromium, which increase local heat and inflammation.

Ayurvedic treatment not only aims to alleviate the symptoms but also addresses the root cause by pacifying Pitta, balancing the other doshas [4], and detoxifying the body. This is achieved through the use of cooling herbs [5], dietary adjustments, and the adoption of hypoallergenic metals such as gold and silver for piercings.

Pathology of Nickel Allergy

Sensitization Phase: When a person is first exposed to nickel, the metal ions penetrate the skin and bind to proteins, forming a hapten-carrier complex. These complexes are taken up by Langerhans cells (specialized antigen-presenting cells in the skin) [6], which process and present them to naïve T-cells in the regional lymph nodes. This initiates an adaptive immune response, leading to the formation of nickel-specific T-cells, particularly CD4+ T helper 1 (Th1) cells. The individual is now sensitized to nickel, meaning future exposures can trigger an allergic reaction.

Elicitation Phase [7]: Upon re-exposure to nickel, these specific T-cells recognize the nickel-protein complexes and become activated. Activated T-cells release cytokines such as interferon-gamma (IFN- γ) and tumor necrosis factor-alpha (TNF- α), which promote inflammation. These cytokines recruit more immune cells, including macrophages and other T-cells, leading to the clinical manifestation of dermatitis: erythema, itching, vesicles, and scaling. The reaction typically appears within 12 to 48 hours after exposure.

Chronic Inflammation: Prolonged or repeated exposure to nickel may result in chronic allergic contact dermatitis, characterized by skin thickening (lichenification), fissures, and scaling. Chronic inflammation is driven by the persistent activation of Th1 cells and the recruitment of additional immune cells, causing ongoing damage to the skin barrier [8].

Risk Factors

Genetic predisposition: Certain individuals are genetically more susceptible to developing nickel allergies due to variations in immune response genes.

Occupational exposure: People working in industries involving frequent contact with metals, such as construction or jewelry making, are at higher risk.

Piercings and Body Modifications: Nickel exposure from piercings is a significant sensitization factor, particularly in women.

Ayurvedic Management of Jewelry Allergy

Herbal Remedies

Ayurvedic medicine emphasizes the use of natural herbs to treat allergic reactions, particularly those caused by metal piercings. Key herbs include:

- *Neem (Azadirachta indica):* Neem contains nimbidin, sodium nimbidate, gallic acid, catechin, and polysaccharides which helps in acting as an anti-inflammatory.
- *Khadira:* contains phytoconstituents like acacatechin, quercetin, gum quercetin etc and these aids the antiallergic property of khadira,
- *Vidanga* contains phytoconstituents like embelin, quercitol, tannin, christembine, iodoembolin, bromoembelin, embelic acid, vilangin etc. these aids the antiallergic and anti-inflammatory property of vidanga.

- Known for its potent anti-inflammatory and antimicrobial properties, neem is effective in reducing the redness, swelling, and irritation associated with jewelry allergies. It also prevents secondary infections.
- *Turmeric (Curcuma longa)*: The active compound in turmeric, curcumin, exhibits strong anti-inflammatory, antioxidant, and antiseptic effects. Turmeric alleviates itching, soothes allergic reactions, and promotes tissue repair. It can be applied topically or consumed internally to reduce systemic inflammation.
- *Aloe Vera (Aloe barbadensis)*: Aloe Vera is widely used in Ayurveda for treating skin conditions. Its cooling properties help to pacify Pitta and calm irritated skin. Aloe Vera also promotes tissue regeneration, aiding in the healing of inflamed piercings.

Topical Applications

Ayurvedic oils and pastes are commonly used for treating inflamed or infected piercings. Some widely used topical treatments include:

- *Jatyadi Taila*: This medicinal oil, used in Ayurveda for wounds and skin infections, is formulated with healing herbs and oils that promote wound healing and prevent infections.
- *Kumkumadi Taila*: A herbal oil composed of saffron, sandalwood, and other herbs, Kumkumadi Taila reduces irritation, enhances tissue regeneration, and minimizes scarring.
- *Sandalwood Paste*: Known for its cooling and anti-inflammatory properties, sandalwood paste helps to soothe inflamed areas around the piercing.

Dietary Recommendations

Dietary adjustments are central to Ayurvedic management of jewelry allergies. A Pitta-pacifying diet is recommended to cool the body and reduce internal inflammation. Key dietary guidelines include:

Cooling foods: Incorporating foods such as cucumbers, melons, and coconut water can help balance Pitta.

Avoidance of spicy, sour, and salty foods: These foods aggravate Pitta and should be minimized during allergy treatment.

Herbal teas: Teas prepared from cooling herbs like coriander, fennel, and licorice are beneficial for soothing the body and reducing inflammation.

Hypoallergenic Metals

Ayurveda advocates the use of gold and silver for piercings, as these metals are hypoallergenic and possess medicinal properties. Gold has anti-inflammatory and healing effects, while silver is known for its antimicrobial properties, making them suitable for individuals with metal sensitivities.

Lifestyle Modifications

In addition to treatments, Ayurveda emphasizes lifestyle modifications to prevent jewelry allergies. Individuals prone to allergies are advised to:

Avoid prolonged exposure to allergenic metals: Choose hypoallergenic jewelry made from gold or silver.

Maintain hygiene: Regularly clean piercings using Ayurvedic herbal cleansers or saline solutions to prevent infections and reduce complications.

Ayurvedic Management of Piercing Complications

Complications such as infections, keloids, and chronic inflammation related to piercings can be effectively managed with Ayurvedic interventions.

- *Infections*: Applying Neem or Turmeric paste helps reduce infection risk. Jatyadi Taila is used to accelerate wound healing.
- *Keloids*: Ayurvedic formulations containing Saffron, Manjistha (*Rubia cordifolia*), and Sandalwood are used to reduce scar tissue and flatten keloids.
- *Chronic Inflammation*: Topical applications of Aloe Vera and Sandalwood, combined with the internal consumption of herbs like Triphala and Guduchi, help boost immunity and reduce inflammation.

Conclusion

Ayurveda offers a comprehensive, natural approach to the management of jewelry allergies and piercing-related complications. By addressing the root causes of allergic reactions, promoting hypoallergenic materials, and utilizing herbal treatments, Ayurveda provides an effective solution for managing jewelry-induced allergies. Through the integration of herbal remedies, dietary changes, and lifestyle modifications, this approach can lead to sustained relief and improved skin health.

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