

AGADTANTRA IN PAEDIATRIC TOXICOLOGY: AYURVEDIC MANAGEMENT OF ACCIDENTAL POISONING IN CHILDREN

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ABSTRACT

Accidental poisoning in children is a significant public health concern worldwide. Ayurveda, through the specialized branch of *Agadtantra* (toxicology), provides a unique perspective on managing and preventing paediatric toxicology cases. Ayurvedic texts detail various natural antidotes, detoxification methods, and preventive strategies that can be integrated with modern toxicology for holistic management. This article explores Ayurvedic principles, diagnostic methods, and therapeutic interventions in pediatric poisoning cases, emphasizing the role of *Vishaghna* (antidotes) herbs and *Panchakarma* therapies.

KEYWORDS: *Agadtantra*, Paediatric Toxicology, Accidental Poisoning, Ayurvedic Management, *Vishachikitsa*, Detoxification, Herbal Antidotes, Child Poisoning Treatment, Ayurveda in Paediatrics, Traditional Medicine.

INTRODUCTION

Paediatric poisoning accounts for a substantial number of emergency hospital visits globally. Children, due to their natural curiosity, are at high risk of accidental ingestion of toxic substances, including household chemicals, medicines, and poisonous plants.^[1] Conventional medicine provides symptomatic and supportive treatment, but Ayurveda emphasizes detoxification, strengthening of immunity, and long-term management through dietary and lifestyle modifications.^[2]

Ayurvedic Understanding of Paediatric Poisoning

In Ayurveda, accidental poisoning is classified under *Garavisha* (artificial poisoning) and *Dooshivisha* (latent toxins).^[3] The unique susceptibility of children to toxins is attributed to their immature metabolic systems, referred to as *Koshta Balavata* (delicate digestive system) and *Dhatwagni Mandya* (weak tissue metabolism).^[4] The role of *Ojas* (vital essence) in immunity and its depletion in toxic conditions is also well-documented in Ayurvedic literature.^[5]

Common Causes of Paediatric Poisoning

1. **Household Poisons:** Cleaning agents, detergents, pesticides, and cosmetics.^[6]
2. **Pharmaceutical Agents:** Accidental overdose of common medications like iron tablets, analgesics, and sedatives.^[7]
3. **Food Contaminants:** Artificial food colours, preservatives, and adulterated food substances.^[8]
4. **Herbal and Plant-Based Toxins:** Accidental ingestion of toxic plants like *Aconitum* and *Datura*.^[9]
5. **Animal Bites and Stings:** Snake bites, scorpion stings, and insect bites.^[10]

Ayurvedic Management of Paediatric Poisoning

Ayurveda offers a multi-pronged approach to managing poisoning, focusing on expelling toxins and restoring balance.

1. *Vamana* (Therapeutic Emesis) and *Virechana* (Purgation)

- Indicated in cases of oral ingestion of poisons to eliminate toxins rapidly.^[11]
- Herbs like *Madanaphala* (*Randia dumetorum*) and *Trivrit* (*Operculina turpethum*) are used to induce emesis and purgation.^[12]

2. Administration of *Vishaghna Dravyas* (Anti-Toxic Herbs)

- *Haridra* (*Curcuma longa*), *Guduchi* (*Tinospora cordifolia*), and *Neem* (*Azadirachta indica*) have potent detoxifying properties.^[13]
- *Shankha Bhasma* (conch shell ash) and *Mridvika* (raisins) are used to neutralize toxins.^[14]

3. Use of *Rakta Mokshana* (Bloodletting Therapy)

- Recommended for cases of snake venom poisoning and septic conditions.^[15]
- *Jalaukavacharana* (leech therapy) is preferred in chronic toxic accumulation.^[16]

4. Diet and Lifestyle Modifications

- Easily digestible, anti-inflammatory diet (*Laghu Ahara*) is recommended.^[17]
- Intake of *Takra* (buttermilk) and *Amla* (Indian gooseberry) helps in detoxification.^[18]

Preventive Strategies in Paediatric Toxicology

1. **Parimarjana Chikitsa (Environmental Detoxification):** Regular use of *Dhoopana* (fumigation) with *Neem*, *Guggulu*, and *Haridra* to purify the living environment.^[19]
2. **Education and Awareness:** Training parents and caregivers on safe storage of medicines and chemicals.^[20]
3. **Immunomodulation through Rasayana Therapy:** Herbs like *Chyawanprash* and *Brahmi* to enhance cognitive and immune functions.^[21]

CONCLUSION

Ayurvedic *Agadtantra* offers a holistic and preventive approach to paediatric toxicology. By integrating Ayurvedic detoxification techniques, herbal antidotes, and preventive strategies with modern toxicology, better outcomes in paediatric poisoning cases can be achieved. Further clinical studies and research are required to validate these traditional interventions.

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