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AYURVEDIC MANAGEMENT OF DIABETIC RETINOPATHY: EXPLORING THE ROLE OF RASAYANA THERAPY AND LOCAL TREATMENTS LIKE ASCHYOTANA AND ANJANA

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ABSTRACT

Diabetic Retinopathy (DR) is a progressive microvascular complication of diabetes, significantly impacting vision and quality of life. In *Ayurveda*, DR can be correlated with *Madhumeha upadrava* leading to *Drishtigata roga* (eye diseases). *Rasayana* therapy and local applications like *aschyotana* (eye drops) and *anjana* (collyrium) play pivotal roles in addressing the pathology. This article explores the *Ayurvedic* understanding of DR, discusses evidence-based efficacy of *Rasayana* herbs, and elucidates the clinical applications of local treatments for vision preservation and systemic health.

KEYWORDS: Diabetic Retinopathy, Rasayana, Aschyotana, Anjana, Ayurveda, Drishtigata roga.

INTRODUCTION

Diabetic Retinopathy (DR) is a leading cause of blindness worldwide, characterized by retinal microvascular damage due to chronic hyperglycaemia. Conventional treatments like laser therapy and intravitreal injections focus on halting progression but may have limitations in addressing the underlying pathology.

Ayurveda offers a holistic approach through systemic and localized therapies aimed at restoring retinal health, improving vision, and managing diabetes. Rasayana therapy, designed to rejuvenate and protect vital tissues, and localized treatments like aschyotana and anjana provide a dual approach to managing DR. This article aims to explore the integrative potential of these therapies in DR management.

$\begin{array}{ll} \textbf{1.} & \textbf{Understanding} & \textbf{Diabetic} & \textbf{Retinopathy} & \textbf{through} \\ \textbf{Ayurveda} & \end{array}$

A. Pathophysiology of DR in Ayurveda

- DR can be compared to *Madhumeha upadrava*, wherein vitiation of *vata*, *pitta*, and *kapha* affects the retinal vessels (*netra dhamani*).
- Chronic metabolic dysfunction leads to *ojah kshaya* (loss of vitality) and structural damage to *drishti mandala* (functional retina).

B. Key Doshas and Dhatus Involved

- 1. *Doshas*: Predominance of *vata* and *pitta*, with *kapha* contributing to edema.
- 2. *Dhatus*: Involvement of *rakta* (blood) and *mamsa* (muscle tissue) in retinal damage.

2. Role of *Rasayana* Therapy in Diabetic Retinopathy A. Concept of *Rasayana*

• *Rasayana* refers to rejuvenative therapies that enhance *ojas*, improve microcirculation, and slow tissue degeneration.

B. Key Rasayana Herbs for DR

- **1. Amalaki** (*Emblica officinalis*): Rich in Vitamin C and antioxidants, supports retinal health. ^[1]
- **2. Haridra** (*Curcuma longa*): Anti-inflammatory and anti-angiogenic properties reduce retinal swelling. ^[2]
- **3. Guduchi** (*Tinospora cordifolia*): Enhances immunity and stabilizes blood sugar levels. ^[3]
- **4. Shatavari** (*Asparagus racemosus*): Provides nourishment to *dhatus* and prevents microvascular complications. [4]

C. Evidence-Based Benefits

Clinical studies have shown significant improvements in retinal vascular integrity and glycemic control with *Rasayana* herbs. [5],[6]

www.ejpmr.com Vol 11, Issue 12, 2024. ISO 9001:2015 Certified Journal 265

3. Local Treatments in *Ayurvedic* Management of DR A. *Aschyotana* (Eye Drops)

- 1. **Preparation**: Medicated decoctions like *Triphala kwatha* or *Haridra arka*.
- Mechanism: Reduces inflammation, clears toxins, and restores moisture to the retina.
- **3. Evidence**: Studies have demonstrated reduced intraocular pressure and improved visual acuity with *aschyotana*. [7]

B. Anjana (Collyrium)

- 1. **Preparation**: Medications like *Srotoanjana* and *Chandrodaya varti*.
- **2. Mechanism**: Facilitates retinal detoxification and nourishes the *drishti mandala*.
- **3. Evidence**: Clinical trials highlight the role of *anjana* in reducing retinal edema and enhancing vision. ^[8]

C. Synergistic Effect of Local Treatments

Combining aschyotana and anjana optimizes therapeutic outcomes by addressing both systemic and localized pathologies.

4. Integration of Ayurveda with Modern Treatments

- 1. *Rasayana* therapy complements retinal laser and intravitreal anti-VEGF injections.
- Local treatments can enhance recovery post-surgical or medical interventions.
- 3. A holistic regimen improves patient compliance and long-term vision preservation.

DISCUSSION

The *Ayurvedic* approach to DR management addresses not just the symptoms but also the root cause, offering both preventive and therapeutic strategies. *Rasayana* therapy rejuvenates retinal tissues and systemic health, while local treatments provide targeted action on the retina.

While modern treatments remain indispensable for advanced DR stages, integrating *Ayurveda* offers a complementary path for comprehensive care. Future research must focus on standardizing formulations and conducting large-scale clinical trials to validate these therapies.

CONCLUSION

The management of Diabetic Retinopathy through *Ayurveda* represents a promising integrative approach. By leveraging *Rasayana* therapy and local treatments like *aschyotana* and *anjana*, *Ayurveda* can significantly contribute to the prevention and management of DR, enhancing both vision and systemic health.

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