

**Review on Retinopathy in Diabetes Mellitus**

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**Abstract**

Diabetic retinopathy is most common and serious complication of diabetes mellitus in retina are observed since last 10 years decades. The exact mechanism by which diabetes causes RETINOPATHY remains under but several theories as a diabetes in microangiopathy have been postulated to explain the typical course and history of disease. In ayurveda there are many formulations given to prevent disease but as such no description available in text which clarifies the progression of Prameha for loss of vision. In this paper we are discussing about clinical assessment of Diabetic Retinopathy according to modern parameter and treatment according to ayurveda. Ayurveda plays important role in integrated management of this condition.

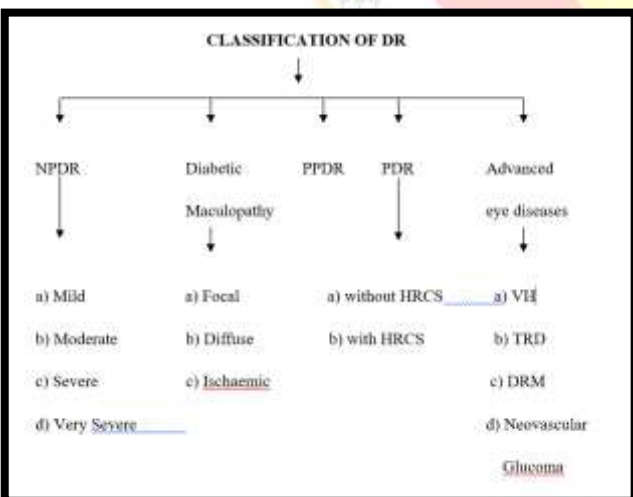
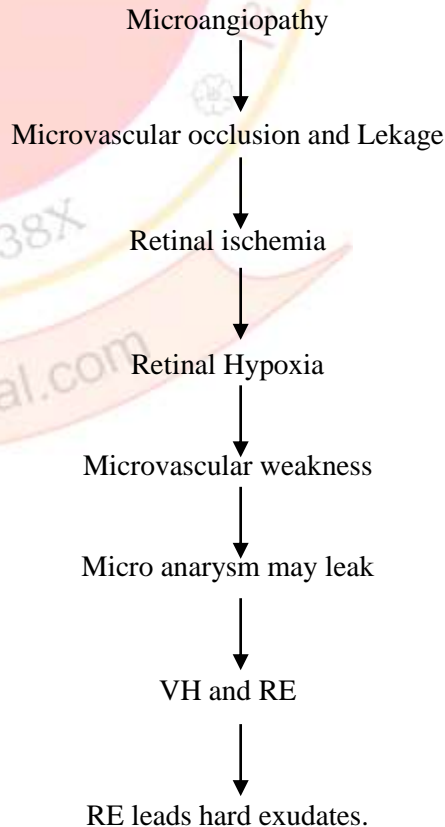
**Key words-** diabetic retinopathy, ayurvedic formulations

**Introduction**

Diabetic Retinopathy is condition occurring in person with diabetes, which causes progressive damage to the retina, the light sensitive lining at the back of the eye. It is the sigh threatening complication of diabetes. It is leading cause of blindness and develops frequently in long standing cases of diabetes mellitus. The severity of diabetic retinopathy depends on duration of disease and the adequacy of its control.

- 6) Oedema
- 7) Cotton – Wool Spot.
- 8) Neovascularisation
- 9) Post Venous detachment
- 10) Hemorrhage

**Pathogenesis**



**Etiopathogenesis**

- 1) Micro – aneurysms
- 2) VH
- 3) Flame Shaped Hemorrhages
- 4) Hard exudates
- 5) Retinal Ischemia

**Clinical Symptoms:-**

- 1) Spots or dark strings floating in ur vision
- 2) Blurred vision
- 3) Flucuation Vision
- 4) Impaired Colour Vision
- 5) Dark or Empty areas in your Vision
- 6) Vision loss
- 7) Reduction of night Vision

**Diabetic Retinopathy in Indian Scenario :**

India – Home of largest no of diabetics in world

According to WHO India will become 1 of the major hubs of diabetic population during next 2 decades.

The no. of adult onset of DM will grow 80 million in 2030 from 18 million in 1995.

**Treatment:**

According to modern science primary prevention by improved medical management of diabetis early detection, and timely treatment all reduced the risk of visual loss. In addition the emergence of new treatment will change the management of diabetic retinopathy which includes conservative management, medical management, surgical managment like pars plana vitrectomy, etc and laser treatment like ARGON LASER Photocoagulation, focal laser, Grid laser.

Diabetic retinopathy can be well controlled by ayurvedic treatment as ayurvedic herbs not only reverse the blood clots formed in the retina and vitreous but also strengthen the metabolic function so that further chances of blood leakage can be minimized. Ayurveda controls the disease and increases blood circulation and nourishes retina. Use of ayurvedic therapies disables the disease and possibility of being cured increases. As such Pramehajanya Netraroga (diabetic retinopathy) is not mentioned in ayurvedic text. Symptom wise it is a complication of prameha. The word prameha is derived from Pra-means excess, Meha- ksharana-passing of urine. So prameha is passing excess urine and turbid in colour (Prabhoota avil mootrata). Twenty types of prameha if ignored and not treated properly in time can convert into madhumeha and become incurable. Diabetes mellitus in ayurveda is known as madhumeha. In madhumeha dosha is kapha pradhan tridosha. Dushya is meda

(predominance), mansa, rakta, vasa, majja, lasika, kleda, shukra, oja. In the above it is clear that all the body tissues are vitiated in madhumeha. This is a disease in which all the tissues or organs may be damaged. The disease is not localized in any one organ of the body but may vitiate any of the important organs. From this it may be clear that eyes are also affected by Madhumeha. According to Acharya Charaka and Vagbhata, eye is afraid of kapha dosha. So Samanya chikitsa sidhanta in ayurveda for diabetic retinopathy can be considered as follows: (1) Pramehahar chikitsa, (2) Kaphahar chikitsa, (3) Srotorodhhar chikitsa, (4) Urdhavraktapittahar chikitsa. In case of haemorrhages: according to Pratimargharan chikitsa sidhanta virechana is the main shodhan chikitsa, urdhavraktapittahar shamana chikitsa, bahya chikitsa includes takradhara, shirolepa or shiropichu with sheeta stambhan aushadi. In case of Sanga (occulsion): Srotorodhhar chikitsa can be done. In case of Macular oedema: Shophahar chikitsa is to be done.

As such no description is present on diabetic retinopathy (prameha updrava) in our texts but it can be treated by following measures:

- Lepa over eyes
- Netra seka or Netra dhara
- Takradhara
- Shirodhara
- Netra tarpana(if no active bleeding)
- Shiro lepa or pichu with sheet stambhan aushadhi
- Putpaaka
- Oral medicines e.g. Saptamrita lauh, Triphla ghrita, Mahatriphla ghrita, Patoladi ghrita, Jivantyadighrita, Triphla churan, Shatavari churan, Rasayan chikitsa.<sup>16,17,18</sup>

The disease cannot be cured 100% but can keep stable in that condition. Many patients suffering from diabetic retinopathy become blind by other means of treatment whereas ayurveda controls this disease and increases blood circulation and nourishes retina.

**Conclusion**

Diabetic retinopathy refers to the retinal changes in patient with diabetic mellitus. It is the leading cause of blindness and develop frequently in

long standing cases of diabetis mellitus. There is no such satisfactory treatment is available for diabetic retinopathy, new approaches are needed to slow the progression and limit the damage caused by this disease. Ayurveda can play important role in the integrated management of diabetic mellitus. This disease cannot be cured 100% but we can keep stable in that condition. By using, Ayurvedic drugs and therapy we can controls the disease and increases blood circulation and nourishes retina.

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