

## CHAPTER 38

### MEDICAL SCIENCES PHARMACY

#### Doctoral Theses

432. AGGARWAL (Ashutosh)  
**Evaluation of Nitric Oxide Modulators and Some Herbal Drugs in the Treatment of Diabetic Retinopathy in Experimentally Induced Diabetes in Rats.**  
Supervisor : Prof. B P Srinivasan  
Th 18220

#### *Abstract*

The present study is an attempt to evaluate the potential of herbomineral preparation, some herbs which have anti-inflammatory, antioxidant, anti diabetic, nitric oxide modulating activity and also L- Arginine and N-nitro-L-arginine Methyl Ester (L- NAME), inhibitor of Nitric oxide synthase (NOS) in the management diabetic retinopathy in streptozotocin induced type 1 and or type II model of diabetes in rats.

#### *Contents*

1. Introduction. 2. Review of literature. 3. Aim and objectives. 4. Materials and methods. 5. Results. 6. Discussion. 7. Summary and conclusions. 8. References.

433. DAS (Rajeev Patrick)  
**Development and Evaluation of Topical Treatment for Psoriasis Using Extracts of Curcuma Longa, Azadirachta Indica and Aloe Barbadensis Using Individualised Morphological Animal Models.**  
Supervisor : Dr. P K Sahoo  
Th 18218

#### *Abstract*

The present study has developed an ethosomal formulation of extracts of Curcuma longa, Azadiracta indica, Aloe Barbadensis

for the treatment of psoriasis. The developed ethosomal system is compared to other transdermal system currently used in treatment of psoriasis. The efficacy of the polyherbal ethosomal system in psoriasis evaluated in mice tail model and other morphologically similar animal model.

*Contents*

1. Introduction. 2. Review of literature. 3. Aims and objectives. 4. Materials and methods. 5. Results. 6. Discussion. 7. Conclusion. 8. References.

434. RAO (Ravi Prakash)  
**Investigation of New Pharmacological Interventions for Diabetic Nephropathy in Experimentally Induced Niddm in Rats.**  
Supervisor : Prof. B P Srinivasan  
Th 18219

*Abstract*

Histopathological studies of rat kidney with treatment of different pharmacological interventions are analyzed by visualizing morphometric changes such as capsular wall distortion, capsular space, glomerular condensation, micro-vascular condensation of glomerulus and glomerular basement membrane thickness. All groups, showed significant renoprotection except glimepiride as compared by diabetic group. Based on these studies it is found that combination therapies are more significant as monotherapies; each combination has different complementary mechanism of action, shows synergistic effects to treat diabetic nephropathy.

*Contents*

1. Introduction. 2. Review of literature. 3. Aim and objectives. 4. Materials and methods. 5. Results. 6. Discussion. 7. Summary and conclusions. 8. References.