

# European Pharma Congress

August 25-27, 2015 Valencia, Spain

## Effects of single-dose morning and evening administration of Pravastatin on antioxidant markers in cholesterol-fed rabbits

**Sahar Mohamed Kamal**  
Ain Shams University, Egypt

**Background:** Accurate timing of statin administration is considered important to obtain the best hypolipidemic effect. Pravastatin is one of the currently prescribed hepatic 3-hydroxy-3-methylglutaryl coenzyme A reductase inhibitors, and was chosen in this study to evaluate its antioxidant effect when administered as a single daily dose in the morning versus evening in cholesterol-fed rabbits.

**Methods:** This 12-week study was performed in New Zealand rabbits, divided into four groups (n = 6 each), ie, normocholesterolemic controls; cholesterol 1% diet, non-treated; cholesterol 1% diet treated with pravastatin in the morning; and cholesterol 1% diet treated with pravastatin in the evening. Plasma total cholesterol levels, superoxide dismutase enzyme levels in erythrocyte lysates, thiobarbituric acid-reactive substance content, catalase, and glutathione enzyme activity in liver homogenates from the tested rabbits were measured.

**Results:** Both morning and evening treatment with pravastatin significantly improved all the measured antioxidant markers in comparison with non-treated cholesterol-fed rabbits. However, results obtained with evening dosing were better than with morning dosing.

**Conclusion:** The antioxidant profile of pravastatin is better when the drug is administered in the evening rather than in the morning

### Biography

Sahar Mohamed Kamal has received MD in basic & clinical pharmacology from pharmacology dept, Faculty of Medicine, Ain Shams University during the period of May 1997- May 2001. She was the supervisor of some theses of young pharmacologists. Currently, she is working as a Professor of pharmacology in the same department. She teaches lectures of pharmacology to both under and post-graduate medical students in faculties of Medicine and dentistry in Ain Shams University, Cairo, Egypt. She has authored 24 research articles. She is a reviewer and EBM in some journals. Her research articles are published on Research Gate and [www.academia.edu](http://www.academia.edu).

[saharkamal2003@hotmail.com](mailto:saharkamal2003@hotmail.com)

### Notes: