

3rd World Congress on Bioavailability & Bioequivalence

March 26-28, 2012 Marriott Hotel & Convention Centre, Hyderabad, India

Ascorbate defense in response to hyperosmotic stress by adrenal and gonads in albino rat (Rattus norvegicus)

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In the present investigation hyper osmotic stress has been created in albino rats by administering 1ml-1%,3%,5% & 15% hypertonic saline (NaCl) daily for 3-5 days via intramuscular injections. 1% saline treatment was ineffective. The bio concentration of ascorbate in liver and adrenals and cholesterol in adrenals and testes decreased significantly after 3% to 15% saline treatments. Hyper osmotic stress was thus found to stimulate adrenals and testes. It however did not affect liver metabolic processes strongly.

Key words: Hyperosmotic stress, steroid producing glands, ascorbate, Mammal-albino rat.

Biography

Priyanka Mehta is a Guest lecturer of post graduate classes of Animal Science at the M.J.P. Rohilkhand University, Bareilly of India. Dr. Mehta received her Ph.D. in 2007 under the supervision of Prof. K.B. Singh from M.J.P.Rohilkhand University of India. She has five years research experience. Her area of interest includes Steroid hormone mechanism, their physiological effects and role of ascorbate as an antioxidant under normal and stressful conditions in mammals- albino rats. She has five research publications, one abroad visit to China as Guest speaker and participated in three National conferences.

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