DEUTERIUM - DEPLETED WATER IN CANCER THERAPY

Roxana Elena Mirică¹,²

¹“Carol Davila” University of Medicine and Pharmacy, 37 Dionisie Lupu Street, 020021 Bucharest, Romania
²National Institute of Work Capacity Assessment and Vocational Rehabilitation, 22 Panduri Street, 5 District, Bucharest, Romania
e-mail: roxmirica@yahoo.com, Phone: 0722.228.720

Abstract

The difference between hydrogen and deuterium leads to differences in the physical and chemical behavior between the two stable isotopes, the concentration of deuterium being about 150 ppm in surface water and more than 10 mM in living organisms. DDW is a non-toxic product, without any side effects. Many studies established that the DDW may be used as adjuvant in the prevention or treatment of the different pathological states, especially in cancer for reducing cytostatic toxicity. Auxiliary tests using immunosuppressors (cyclophosphamide) showed a strong protective effect of DDW against the decrease of immunologic parameters. Other results highlighted a decrease in tumor mass or its total regression. This discovery of the 21st century reflects a new possibility in oncotherapy and a promising new anticancer agent with a potential for future clinical application.

Key words: cancer, cancer therapy, deuterium-depleted water, tumor regression

Received: September, 2010; Revised: November, 2010; Accepted: November, 2010