

3rd International Conference on Translational Medicine

November 03-05, 2014 Las Vegas, USA

Perioperative NSAIDs may reduce early relapses in breast cancer: Perhaps transient systemic inflammation plays a role

Michael Retsky

Harvard School of Public Health, USA

While there have been important improvements in recent years, a general method to prevent relapses from early stage cancer is one of the most important unsolved problems in oncology. Author and his colleagues have been studying a bimodal pattern of hazard of relapse among early stage breast cancer patients that has been identified in multiple databases from US, Europe and Asia. In order to explain early relapse, they postulated that something happens at about the time of surgery to provoke sudden exits from dormant phases to active growth and then to detection. Most relapses in breast cancer are early. Recent data suggest an unexpected mechanism. A retrospective analysis of results from 327 consecutive breast cancer patients was conducted comparing various perioperative analgesics and anesthetics. A common NSAID analgesic used in surgery produced far superior disease-free survival in the first 5 years after surgery. The expected prominent early relapse events in months 9-18 are reduced 5-fold. If these observations hold up to further scrutiny, it could mean that the use of inexpensive and non-toxic anti-inflammatory agents at surgery might eliminate early relapses. Transient systemic inflammation accompanying surgery (identified by markers in serum) could facilitate angiogenesis of dormant micrometastases, proliferation of dormant single cells, and seeding of circulating tumor cells (perhaps in part released from bone marrow) resulting in early relapse and could have been effectively blocked by the perioperative anti-inflammatory agent.

Biography

Michael Retsky (PhD in Physics from University of Chicago) made a career change from physics to cancer research. He is Editor-in-Chief of Journal of Bioavailability and Bioequivalence, on staff at Harvard School of Public Health, honorary faculty at University College London, and Professor Adj. at UANL, Monterrey, Mexico. He was on Judah Folkman's staff at Harvard Medical School for 12 years. He is on the board of directors of the Colon Cancer Alliance and has published more than 60 papers in physics and cancer. He has a patent pending for treatment of early stage cancer.

michael.retsky@gmail.com