

## Promoting positive results; Ignoring the negative ones: The story of spinal cord injury treatment press coverage

This is a story about the power of journalism. About how deliberate reporting changes medical opinions of experts and has a long lasting effect on the treatment of injured patients. Spinal cord injured patients are usually young individuals that sustain an injury that will indefinitely change the course of their life. The only affective treatment found to this date is prevention.

During the 80's and 90's of the last century a "magic" drug was introduced to treat spinal cord injury. This drug is called Sulomedrol (Methylprednizolone), a synthetic glucosteroid produced by Pfizer. Sulomedrol was investigated by Dr. Michael Bracken, a Professor of Epidemiology at Yale University, and 3 papers were published in that era promoting the use of Sulomedrol to any patient with spinal cord injury. Pfizer with aid of the researcher team promoted the use of the drug by sending thousands of letters to hospitals, emergency rooms and physicians quoting the positive results from the papers published. The public press further promoted the story of a miracle drug that could make a paralyzed patient walk again. On 1992 the Time magazine published an article by the name "Tackling Spinal Trauma" describing the marvelous effects of the new drug. Needless to say both Pfeizer and Dr. Bracken performing the study and promoting the use of this drug had financial conflicts. As spinal cord injury is a cause for severe disability, either with or without treatment, malpractice lawsuits against physicians not prescribing Sulomedrol became popular. Medical papers presenting surveys on prescription rates among physicians clarified that more physicians were prescribing Sulomedrol because of litigation fear than those who actually believed it was useful. On 2002 the neurosurgical association published guidelines for spinal cord injury treatment and Sulodedrol treatment was regarded as a treatment option only. On 2005 the final results of a study comparing treatment of severe head trauma patients with Sulomedrol compared to no treatment. The study included over 10,000 patients and showed significant rise in death rates and morbidity in the treated patients with no benefits for the treatment group. Spine trauma is commonly combined with other injuries and some patients suffering from spinal cord injury are influenced by co-morbidities and hospitalization related complication. After this publication, the objections to steroid use for spinal trauma became more evident. The 2013 neurosurgical guidelines were dramatically changed to a recommendation not to administer Sulomedrol for spinal cord injury patients. Yet, even today spine surgeons around the world are still administering steroids for these patients, admitting to do so because of either belief in clinical benefit or fear of litigation. More than 100,000 people die each year from prescribed medications, and administration of Sulomedrol was shown to be harmful. The rationale thought process for administration of dangerous drug not recommended for use by official guidelines, would be fear of litigation for those administering the drug rather than those not doing so. Needless to say that the negative effects of the drug were not published on any public newspaper, nor was it distributed to physicians by the drug companies.

Since selection bias will always exist both in the public press and in medical reporting, physicians

1/2



## Atlas of Science another view on science http://atlasofscience.org

need to stay up to date acquiring knowledge continuously. Reduction of medical litigation by changing compensation laws can reduce the rate of medico-legal considerations in treatment and enhance evidence-based care.

Ran Harel, MD Spine Surgery Unit, Department of Neurosurgery, The Talpiot Medical Leadership Program, Sheba Medical Center Ramat Gan, Israel

## **Publication**

Steroid Therapy for Spinal Cord Trauma: Where's the Evidence?

Harel R

World Neurosurg. 2015 Dec 29

2/2