

Journal Watch

Influenza Vaccination for Terminally Ill Cancer Patients Receiving Palliative Care

Citation: Menahem Sasson, Michal Mandelboim, Pesach Shvartzman. Influenza Vaccination for Terminally Ill Cancer Patients Receiving Palliative Care: A Preliminary Report, Journal of Pain and Symptom Management. Volume 41, Issue 2, February 2011, Pages 485-490.

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Abstract:

Context

Cancer patients have impaired humoral and cellular immunity, and are more susceptible to infections; their immunological response is expected to be less effective than that of healthy people. *Objectives:* To assess the immune response to influenza vaccine in terminally ill cancer patients in a home palliative care unit. *Methods:* During the fall of 2000–2001, 2005–2006, and 2006–2007, terminally ill cancer patients treated by our home palliative care unit were vaccinated against influenza with Vaxigrip® (inactivated). Blood samples were taken before and four weeks after vaccination. Influenza immunological response parameters accepted in the literature were calculated. *Results:* Eighteen terminal cancer patients were vaccinated against influenza strains predicted for that year; 13 completed the study. The other five patients died within less than a month from the time of vaccination. The serum protection rate increased from 15.4% before to 61.5% after vaccination, and the serum response rate was 53.8% for all the three strains of vaccination. Mean-fold increase was 24.9 for influenza A-H1N1, 15.4 for influenza A-H3N2, and 2.8 for influenza B. Geometric mean titer was increased for influenza A-H3N2 from 8.3 before vaccination to 159.4 after vaccination; for influenza A-H1N1 from 5.2 to 124.3, and for influenza B from 5.7 to 44.6. *Conclusion:* The results indicate that influenza vaccination is probably effective and can be offered to terminally ill cancer patients with a life expectancy of about three months in a home care palliative care unit.

Strengths:

- First study to evaluate the efficacy of influenza vaccination in terminal cancer patients
- Used the most commonly referenced method for the assessment of anti-hemagglutinin antibody levels → the do not erase inhibition test (HI test)
- Used generally acceptable targets for immunological response

Weaknesses:

- single center with a specialized group of palliative care clinicians, thereby limiting generalization of the results to other care settings
- small number of patients
- only applicable to patients with terminal cancer over the age of 60, whom have more than 3 months to live

Relevance to Palliative Care:

- The results indicate that influenza vaccination is probably effective and can be offered to terminally ill cancer patients with a life expectancy of about three months in a home care palliative care unit. However, the study does not evaluate quality of life and only

takes into account surrogate markers and did not discuss life prolongation. Larger multicenter trials are indicated.