Silver Clear Nylon Dressing is Effective in Preventing Radiation Induced Dermatitis in Patients with Gastrointestinal Cancer: Results from a phase III study

T. Niazi1,2, T. Vuong1,2, L. Azoulay1, C. Marijnen3, K. Bujko4, E. Nasr5, C. Lambert1, M. Duclós1, M. David1, B. Cummings6, 1Mcgill University, Montreal, QC, Canada, 2Segal Cancer Centre, Jewish General Hospital, Montreal, QC, Canada, 3Leiden University Medical Center, Amsterdam, Netherlands, 4Department of Radiotherapy, The Maria Sklodowska-Curie Memorial Cancer Centre, Warsaw, Poland, 5Hotel Dieu de France Hospital, Beirut, Lebanon, 6The Princess Margaret Hospital, University of Toronto, Toronto, ON, Canada

Purpose/Objective(s):
For patients with anal canal and advanced rectal cancer, chemo-radiation therapy is a curative modality or an important adjunct to that of surgery. Nearly all patients treated with this modality experience radiation induced dermatitis (RID). The prevention and effective treatment of RID is thus of considerable clinical relevance. The present study is a phase III controlled trial to validate the efficacy of silver clear nylon dressing (SCND) against standard skin-care for these patients.

Methods: 42 rectal or anal canal cancer patients were randomized to either SCND or standard skin-care. SCND was applied from day-one of radiation therapy (RT) until two weeks after the treatment completion. In the control arm sulfadiazine cream was applied at the time of skin dermatitis. Printed digital photographs, taken at the last day of the treatment and 2 weeks prior and after, were scored by 10 blinded readers, using the common toxicity scoring system for skin dermatitis.

Results: The radiation dose ranged from 50.4–59.4 Gy and there were no difference among the two groups. At the last day of RT, in which the most severe RID occurs, the mean dermatitis score for the standard arm was 2.53 (SD: 1.17) and for SCND patients was 1.67 (SD: 1.2, p=0.01). At two weeks after RT the difference was 0.39 points in favor of SCND (p=0.39). There was considerable intraclass correlation amongst the ten observers.

Conclusions: Silver coated nylon dressing is effective in reducing radiation induced dermatitis in patients with gastrointestinal cancer treated with combined chemotherapy and radiation.