Intravesical Bacillus Calmette-Guerin (IV BCG) treatment for bladder cancer – Working Toward Better Patient Outcome
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Introduction
Intravesical Bacillus Calmette-Guerin (IV BCG) is an effective treatment for non-muscle invasive bladder cancer (NMIBC). In Hong Kong West Cluster, about 98% of bladder cancer patients who receive the IV BCG treatment after TURBT will be referred to Geriatric Urology Center (GUC), Tung Wah Hospital. At present, a regime of induction 6 doses weekly BCG instillations followed by a maintenance schedule of 3 doses weekly instillations at 3 and 6 months thereafter until a total 18 doses completed. Oversea literature showed only 16% of patients who undertook BCG completed the full course of this powerful treatment against high risk bladder cancer disease.

Objectives
To review the local data in patients receiving BCG in GUC and to explore the beneficial role of nursing intervention and patient education in the BCG treatment of these patients.

Methodology
A retrospective review of bladder cancer patients referred from HKWC Urologists for treatment of IV BCG in GUC from January 2013 to December 2015 was conducted.

Result
68 patients underwent IV BCG treatment was included in this review. 39 patients (57%) completed the full treatment course of BCG with 5 patients (7%) reported that medication (Panadol and Pyridium) could relieve the side effect after instillation. 2 patients (3%) required 50% reduction of their BCG dose. Of the 43% (29 patients) who did not complete the treatment, it had been noted BCG side effects were the underlying reason for drop-out in 19% of patients. The remaining 24% failed to
complete the treatment due to cancer recurrence, disease progression or other concurrent causes. Among those patients who failed completion of treatment, 23 patients aged older than 70 years. Nursing techniques in catheterization and instillation could be one of the symptoms control to minimize the local or systemic side effects from BCG. Nursing assessment of pain, bladder irritation with frequency and urgency, hematuria and flu-like symptoms is imperative. Early detection and education of side effects with definitive treatment, prophylactic medication prescription after instillation and appropriate reduction of the dose of BCG could reduce the severity of side effects. In conclusion, BCG treatment is an effective treatment for non-muscle invasive bladder cancer and it causes significant local side effects. In order to improve patient outcome, nurses can contribute to limit potential side effects through active management of symptom control, better catheterization and instillation techniques and timely patient education. As a result, more patients can complete the BCG treatment and receive the maximum benefit from this bladder cancer treatment.