Title

Comprehensive Geriatric Assessment Programme – Optimising cancer care for elderly patients

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Summary: Include the outline and conclusions of the research

The Comprehensive Geriatric Assessment (CGA) programme allowed us to evaluate cancer patients aged 70 years and above in which their multiple problems and health concerns are uncovered and explained. With this study in place, we aim to be the first to analyse all the domains of the CGA in an Asian elderly patient population and its prognostic implication. It is also our aim to validate the normogram developed in 2011 on this independent cohort to predict the prognosis for this group of patients. In this cohort, the nomogram achieved a high level of discrimination which validates the initial study and confirms the practicality of the normogram use in routine clinical practice. Extending and formalising the Comprehensive Geriatric Assessment model of care provides older patients with holistic treatment plans that are tailored to their unique needs, optimizing their cancer treatment plan.

Aim of Research

With the CGA programme, we aim to perform a prospective collection and analysis of CGA data from 1500 consecutive cancer patients over a period of 10 years. In 2011, we published our first local data on CGA, with the development of a normogram to help us predict prognosis for this group of patients. This time we planned to validate the normogram on an independent cohort in order to allow us and other groups around the world to use it on their older adults with cancer population.

Method of Research

The CGA assessment was carried out through a questionnaire available in both English and Mandarin, administered to all patients by a trained research coordinator, before they are compiled into a booklet. The assessment covers 7 distinct domains of the patients including physical status, mental status,

medical conditions, geriatric syndromes, review of medication list, nutritional status as well as their emotional status.

Through CGA, we were able to provide a predictive value for chemotherapy toxicity, survival and treatment choices, identify reversible conditions that may improve patient's fitness for treatment, determine patient decision making capacity and clarify patient's values and goals to optimise their cancer treatment plan. Clinical and CGA data retrieved through CGA as well as data on all-cause mortality captured from the national death registry assists in the establishment of a robust clinical database for accurate analysis.

Results of Research

Compared with the training cohort (2011 study), patients in the testing cohort were younger (median: 76 vs 77 years; p=0.048), had a higher percentage of patients diagnosed with stage 1-2 disease (28% vs 15%; p<0.001); better ECOG performance status 0-1 (73% vs 33%; p<0.001); had a normal serum albumin (72% vs 21%);p<0.001) and lower GDS score (median: 2 vs 4; p<0.001). The nomogram achieved a high level of discrimination in the testing cohort (0.7112), which was similar to the level based on the training cohort (0.7108). This study validates the initial study and confirms the usefulness of the normogram use in routine clinical practice.

Future Area to take note of, and Going Forward

Future plans will be to review and refine the model specifications of the normogram, to validate and compare the performance of the other prognostic scoring indices against our NCCS normogram, and to collaborate with other cancer centres to externally validate the normogram.

Means of official Announcement of Research Result

We have just completed the manuscript for the study and will be submitting it for publication soon. Once is has been accepted, we will be happy to make a formal announcement of the findings.