Abstracts of Poster Presentations: Delivery of Health Services

P40-Ab0051
Assessment of Functional Outcome in Patients Sustaining Moderate and Major Trauma: A Prospective, Multi-centre, Cohort Study

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Introduction and Objectives: Trauma care systems aim to reduce death and to improve functional outcome. Evaluating functional recovery is important as this will facilitate comparison with other settings, assessment of the impact and effectiveness of the system, and provide prognostic information for healthcare workers, patients and relatives. The aim of this study was to describe adult patients' long term overall functional outcome after sustaining moderate and major trauma in Hong Kong.

Methods: Ethical approval was for a prospective, multi-centre, cohort study of adult trauma patients admitted to one of three trauma centres (Prince of Wales Hospital, Queen Elizabeth Hospital and Tuen Mun Hospital), with moderate to severe injury (ISS>9), and surviving to 48 hours. The extended Glasgow Outcome Scale (GOSE; with score=1 for death to =8 for excellent recovery) was used to measure functional outcome from baseline to 2 years after injury. Good outcomes were defined as GOSE>7.

Results: From 1st January 2010 to 30th September 2010, 400 patients were recruited to the study (mean age 53.3 years (range 18-106;70% male)). For patients with ISS 9-15, 64/139(46%) were lost to follow up at 2 years. 8(6%) patients died, no patient was in a vegetative state (GOSE=2), and 38(27%) patients had a GOSE>7. If all patients lost to follow up had GOSE=7, then the maximum possible with good recovery is 102(73%); i.e.(38+64)/139).

For patients with an ISS>16, 107/261(41%) were lost to follow up at 2 years. 61(23%) patients had died, 1 patient was in a vegetative state (GOSE=2), and 44(17%) patients had a GOSE>7. At 2 years the maximum possible GOSE>7 is 151 (58%); i.e. (44+107)/261).

Conclusions: Two years after injury, 6 to 23% patients had died, and 17 to 27% had a good recovery. The overall possibility of a good recovery could reach 58 to 73%.

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A Study on Health-related Quality of Life of Patients with Colorectal Neoplasm and Cost-Effectiveness Analysis of Colorectal Cancer Screening in Hong Kong

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Background: Colorectal cancer (CRC) is the most common cancer in Hong Kong. Health-related quality of life (HRQOL) is an important health outcome of CRC survivors. Screening for CRC has the potential of preventing CRC death but there was uncertainty on its impact on HRQOL and the cost-effectiveness of different screening strategies.

Aims and Objectives: To determine the HRQOL and health preference of patients with colorectal neoplasms (CRN) including polyps, and to evaluate the cost-effective CRC screening strategies in terms of QALY gained compared to no screening.

Methods: A longitudinal study on the HRQOL of CRN patients over 12 months with 3 evaluations at six-monthly intervals. Each patient completed the Functional Assessment of Cancer Therapy-Colorectal, version 2 of the Short-Form 12-item Health Survey (SF-12) and SF-6D and a structured questionnaire on socio-demographic data. HRQOL scores of CRN patients were compared to those of the general population and by different CRN disease stages. The associations of HRQOL with socio-demographics and disease-related factors, and the change of HRQOL over 12 months were explored. The health preference scores by CRN disease stages and direct medical costs of subjects of the HRQOL study were applied together with survival data extracted from the literature to a Markov model to evaluate the cost-effectiveness of 5 different CRC screening strategies against no screening in terms of QALYs gained.

Results: 554, 479 and 414 patients completed the baseline, six months and 12 months survey, respectively. Overall patients with stable CRN reported worse SF-12 physical summary scores but better SF-12 mental summary and similar SF-6D health preference scores than those of the HK general population. Disease stage at diagnosis was the most significant determinant of HRQOL of CRN patients. Rectal cancer was associated with worse physical HRQOL and health preference scores. Immunochemical faecal occult blood (I-FOBT) two-yearly was the most cost-effective screening strategy at an ICER of HK$43,660 per QALY compared to no screening. Annual I-FOBT was more effective than biennial I-FOBT but more expensive with an ICER of HK$51,610 per QALY. The ICER/QALY of both are below the UK NICE benchmark of GBP20,000 (~HKD$240,000) or the HK 2013 annual GDP of ~HKD$260,000.

Conclusions: HRQOL of Chinese patients with stable CRN, except those with advanced (stage III and IV) cancers, were comparable to the general population norm in HK. Biennial I-FOBT and annual I-FOBT are cost-effective CRC screening strategies for the HK general Chinese population.

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