

Clinical Characteristics of Bladder Cancer in Indonesia: The Largest Data Presentation from Five Hospitals

Introduction and Objective: We present the largest clinical characteristics of Bladder Cancer data from five teaching hospitals in Indonesia.

Materials and Methods: Data collection were conducted in 5 Teaching Hospitals among 5 high-density population cities in Indonesia (i.e Surabaya, Malang, Semarang, Surakarta and Denpasar) during the period of 2006 – 2010. These hospitals were top-referral centres in their regional coverage, with Dr. Soetomo Hospital (Surabaya) as the top-referral centre for East Indonesia. Descriptive data analysis were done against 587 eligible samples, based on the histopathology result of any Bladder Cancer types. Cross-tabulation analysis were also done to present distinctive characteristics among centres.

Results: Mean age of sample was 61 yrs (23-92), and consisted of 487 (83%) males and 99 (16.9%) females. Painless-hematuria, difficulty in voiding and dysuria were the main complaints contributing 64.5%, 23% and 7.1% respectively. At least 60% were curative-intent treatment candidates presented as T1 (4.3%), T2 (22.8%), T3 (37.3%) and T4 (35.3%). Eighty-nine percent of samples were metastasis-free at the time of diagnose. High-grade urothelial ca were the main histopathology results (62.5%), followed by low-grade urothelial ca (28.8%) and squamous cell ca (2.9%). Though rare, adeno ca, signet-ring cell ca and epidermoid ca were also available contributing 1.9%, 1.9% and 1.6% respectively. Radiotherapy as definitive treatment reach the highest percentage (44.1%), followed by chemotherapy (11.9%) and radical cystectomy (5.6%). Among those radical cystectomies, 80% were conducted by the centre in Surabaya followed by 13.3% in Denpasar. MVAC were the regiments for chemotherapy mainly used (24.5%), followed by Paxus-Cisplatin, Paciltaxel-Carboplatin and Gemcitabine with 13.2%, 1.9% and 1.9% respectively.

Conclusions: The pattern of Bladder Ca in Indonesia is slightly different from the western countries in the world. The more advanced cases (based on T staging) were related to the low health-seeking behaviour. Instead of radical cystectomy, radiotherapy as definitive treatment were preferred by most patients due to the risk of operation and the post-operative side effects. Radical cystectomies were concentrated at 2 hospitals, due to a better post-operative care in terms of resources.