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Profile and Risk Factors of Several Urology Malignancies in Riau Province, Indonesia

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ABSTRACT

Background: Urology malignancy is still one of the concerning health problems due to high incidence and morbidity.

Objective: The aim of this study was to reveal the profile and risk factors of several urology malignances.

Methodology: We reviewed several published journal of urology malignancy such as bladder cancer, prostate cancer, kidney cancer, testicular cancer and penile cancer in which the cancer data were collected form medical records in Arifin Achmad Hospital, Riau, Indonesia for several different years.

Results: There were 103 prostate cancers in which 61 (59.2%) were locally advanced stage and 42 (40.8%) were advanced stage from January 2010 to December 2016. There were 70 bladder cancers in which 46 (57%) were advanced stage and 42 (43%) were superficial stage from January 2011 to December 2015. There were 18 kidney cancers from January 2013 to December 2017. There were 15 testicular cancers in which 9 (60%) were advanced stage and 6 (40%) were early stage from January 2009 to December 2014. There were 35 penile cancers from January 2011 to December 2016. We found high incidence of advanced prostate cancers with high ages, high abnormality in digital rectal examination, high prostate volumes with TRUS, high PSA levels, high poorly differentiated adenocarcinomas, high Gleason Scores, high metastasis in bone scans and high treatment with Androgen Deprivative Therapy. We found there were 19 (18.5%) prostate cancers in prostate enlargement patients with normal DRE and PSA findings as the prediction. We found well responses of clinical symptoms and PSA follow up in advanced stage prostate cancer patients in one year managed by hormonal therapy. Bladder cancer is common after prostate cancer and most likely affects male elderly more than women elderly. Radiotherapy is effective against bladder cancer given that it is compatible with the stage of cancer. There were 13 kidney cancer (renal cell carcinoma) patients, consisting of 53.85% males and 46.15% females. Recurrences and distant metastases were not found after one year of radical nephrectomy in advanced kidney cancer patients. Penile cancer in our hospital is characterized by elderly age, half of the patients were Bataknese, location was penile shaft, clinical symptom was lump on the penile, squamous cell carcinoma in histopathology, grade G1 of primary tumor, stage II, chest X-ray and abdominal ultrasound as radiological examination and manage by total penectomy. Risks factors of renal cell carcinoma patients in our hospital were Pekanbaru city origin, Malay tribe, smoking history, non-obesity and hypertension. Risks factors of testicular cancer patients in our hospital were Pekanbaru city origin, Malay tribe, smoking history, history of cryptorchidism, family history and a history of testicular cancer. Risks factors of penile cancer patients in our hospital were Pekanbaru city origin, Batak tribe, smoking history and not circumcised.

Conclusion: We found high incidence and several risk factors of several urology malignances and we plan to study in depth pathobiology for understanding the correlation between the tribes and the urology malignances.

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