POST GRADUATES ABSTRACTS

PG - 54 : METABOLIC SYNDROME: A HIGH RISK FOR UROLOGICAL MALIGNANCIES?

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Introduction: The incidence of Urological Malignancies has been increasing globally as well as an increase in the number of patients being diagnosed with Metabolic Syndrome. Patients with type 2 diabetes mellitus suffer from a significantly higher risk of urological malignancies and Ca bladder. The mechanisms of such an increased cancer risk in the diabetic patients may be related to insulin resistance, hyperinsulinemia, proinflammatory status and increased oxidative stress. Smoking, obesity, dyslipidemia, hypertension have been identified as potential risk factors for renal malignancy [4,5,6]. In diabetics, cancer contributes
13% to mortality and high rates of cancer recurrence [7]. Lack of neonatal circumcision, poor genital hygiene, phimosis, human papilloma virus infection and smoking are all risk factors for invasive penile cancer. Increasing BMI was associated with higher risk of developing invasive penile cancer. The use of tobacco in any form is a risk factor for penile carcinoma.

Materials & Methods: This was a prospective study of 49 patients with Urological Malignancy between January 2016 and June 2017. Individuals with the following Urologic Malignancies were included in this study: RCC, TCC Bladder & Upper Tract, Ca Penis, Ca Prostate. Following Criteria was used for the clinical Identification of the Metabolic Syndrome – (Any 3 of the Following), Abdominal obesity * Waist circumference, Triglycerides, HDL cholesterol, Blood pressure, Fasting glucose.

Results: Of the total 49 patients 22(44.8%) were Diabetic, 26(53%) were Hypertensive and 18(36.7%) were both. Out of the 49 patients 23(46.9%) were Obese. Among the total 49, 28(57.1%) were Smokers, 28(57.1%) were Alcoholic and 19(38.7%) were both. The average waist circumference was noted to be the highest in the RCC group. The average S. Triglyceride levels were found to be highest in the Ca Bladder group. The average S. HDL levels were found to be highest in the Ca Bladder group 18(36.7%) of the 49 patients were found to fulfil the criteria for Metabolic Syndrome. The highest incidence of Metabolic Syndrome was noted in the Ca bladder group 8(50%) of the 16 cases and the least in the RCC group 1(20%) out of the 5 cases.

Conclusion: Many adverse health consequences result from Metabolic Syndrome including the increased risk for several cancers. Our study shows a high incidence of Metabolic Syndrome in patients with Urological Malignancies. Most factors responsible for metabolic syndrome are modifiable hence greater emphasis on lifestyle modification and control of comorbid conditions like DM and HTN may be beneficial in reducing the incidence of urological malignancies.