The Frequency of Multiple Primary Cancers: 1952-2004

Fayek Alhilli, PhD (Path)* Ali Abalkhail, FRCPath** Nagalla S Das, MD*

Objective: To evaluate the frequency rate and site of origin of multiple primary malignancies (MPM) in Bahrain from 1952 to 2004.

Design: Retrospective study.

Setting: Pathology Department, Salmaniya Medical Complex, Bahrain.

Method: Confirmed malignancies diagnosed in Bahraini patients from 1952 to 2004. The diagnoses are based on histopathology and hematology archives of the government, private hospitals and clinics.

Result: Six thousand nine hundred and nineteen cancer patients were found in the archives, 122 (1.7%) had MPM; 31 (25%) had synchronous and 91 (75%) had metachronous lesions, the annual frequency rate was 2.3 patients/year.

Equal M:F ratio was found, but males had more synchronous while females had more metachronous, double and triple cancers lesions. Sixty percent of all cancer patients were above the age of 50 years compared to 69% in all MPM patients, (74%) in synchronous, (67%) in first age metachronous and (77%) in second age metachronous lesions. The three most common metachronous MPM occurred in association with cancers of breast (21%), urinary tract (17%) and prostate (8%). Amongst males the commonest combinations occurred in association with cancers of urinary tract (28%), prostate (16.3%) and kidney (7%). Amongst female breast (38%), thyroid (10.4%) and urinary tract (6.3%) were the most common.

Conclusion: These results are reflection to the overall cancer pattern in Bahrain and may not apply to other regions or countries.

Bahrain Med Bull 2011; 33(1):