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Letter to Editor

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Common infections in several cancers

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Sir,

The aim of this letter is to investigate common infections in the patients with several usual cancers. Globally breast cancer is the most common and cervical cancer is the third most common cancer among females [1, 2]. In spite of breast and cervix cancers being among the common cancers in females, they have many etiological factors. Factors associated with breast cancer are obesity, nulliparity, hormonal exposure, history of familial cancers which are contrasting to those associated with cervical cancer [1, 2] Human papilloma virus infection is the most common causative agent for cervical cancer and risk of disease is higher among those with low socioeconomic status, poor socioeconomic status, multiparity, and sexual promiscuity [1, 2]. Also, HIV infection is a known predilector for multiple cancers. Carcinoma cervix was determined as an HIV-defining condition, but, breast cancer has no known association with HIV [1, 2].

Solid tumors are much more common than hematologic malignancies [2]. These include obstruction (most often caused by progression of the tumor), disruption of natural anatomic barriers such as the skin and mucosal surfaces [2]. Common sites of infection include the skin and skin structures (including surgical site infections), the bloodstream (including infections associated with central venous catheters), the lungs, the hepato-biliary and intestinal tracts, and the urinary tract, and include distinct clinical syndromes such as post-obstructive pneumonia, obstructive uropathy, and neutropenic enterocolitis [2]. The epidemiology of most of these infections is changing with resistant organisms [MRSA, *Pseudomonas aeruginosa*, extended spectrum beta-lactamase (ESBL)-producing organisms], polymicrobial infections, with enteric gram-negative bacilli, Enterococcus species, anaerobes, and *Clostridium difficile* [2].

High risk human papilloma viruses (HPVs) may have a causal role in some breast cancers. The main difficulty is that HPV infections are common, but HPV-associated breast cancers are uncommon [3, 4].

Most infections in patients with types of tumors are caused by the individual patients' resident microflora. Consequently, the distribution of causative organisms mirrors the normal microflora at a particular site of infection. Acquisition of nosocomial or healthcare-associated bacteria generally occurs several days after hospitalization [3-5].

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