Occam’s Razor vs Hickam’s Dictum
A Case of a Singular “ Syndromic” Diagnosis Explained by Dual Simultaneous Malignancies
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Introduction

Scientific thought process has traditionally taught us to follow the principal of Occam’s Razor, to gather all information, identify and then treat the most probable etiology in a patient’s clinical presentation. However, the principal of Hickam’s Dictum reminds us that a patient “can have has many diagnoses as he dam well please.” We present a case which highlights the importance of keeping both these principals in mind.

Case

A 64-year-old multiparous (GSPS) female, with pertinent history of schizophrenia, presented to the emergency department of an urban hospital with weakness and multiple episodes of diarrhea accompanied by foul smelling urinary incontinence over the past 4 days. Physical exam revealed a tachycardic, hypotensive patient with abdominal tenderness to palpation in the epigastrium and right lower quadrant. Urine was brown and turbid when a catheter was placed. Labs showed significant leukocytosis with left shift, severe anemia, and mildly elevated troponin. EKG showed sinus tachycardia. The patient was admitted for urosepsis, started on IV antibiotics and then responded well to a fluid challenge. Due to the abdominal pain, CT of the abdomen and pelvis were done, revealing severe right renal perinephric stranding and hydroureterism. Distally, hydroureter was noted with an abrupt fluid cutoff just proximal to the urerovesicul junction with space occupied by poorly defined nodular soft tissue. Malignancy was suspected, with both urologic and gynecologic possibilities.

Multiple indices of malignancy were noted. Malignant urothelial cells were identified in urine cytology. PAP smear was remarkable for squamous cell carcinoma. Transurethral cystoscopy with biopsy confirmed the presence of both invasive squamous cell carcinoma and invasive papillary urothelial carcinoma. Given the identification of dual invasive cancers, and in accordance with the principles of autonomy, beneficence, and nonmaleficence, shared decision making with the patient and her family resulted in a plan to not pursue invasive therapy, and instead accommodate non-invasive management of her symptoms to assure adequate comfort.

Discussion

In this case, the signs, symptoms, and initial ancillary studies of our patient presented us with a singular syndromic diagnosis, narrowed down by Occam’s razor, of urosepsis. Tissue pathology raised the question of the primary cause by identifying separate coexisting invasive malignancies; i.e. Hickam's Dictum. This case illustrates that a thorough appreciation of the principals of both Occam’s razor and Hickam’s Dictum must always be kept in mind in order to adequately address our patients’ illnesses, however singular or plural they may be.

References: