9th ANNUAL DEPARTMENT OF PATHOLOGY YOUNG INVESTIGATORS’ DAY
POSTER SESSION
Thursday, April 5th, 2007
TURNER CONCOURSE
REGISTRATION FORM

E-mail COMPLETED Registration form and abstract to:
Stacey Morgan (smorgan9@jhmi.edu) on or before
Friday, March 16th, 2007

If you have questions or problems regarding your submission, please contact Stacey
Morgan via e-mail (smorgan9@jhmi.edu)

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Applicant’s Division:  GENITOURINARY PATHOLOGY___
Faculty Preceptor:  ____JONATHAN I. EPSTEIN, M.D.
(Must hold a primary appointment in Pathology)
Appointment Category:  _____House Staff ___XX__Clin Fellow ___XX___Research Fellow
                          _____Medical Student _____Graduate Student (Program:__________)
Register for:  XX___ Clinical Research ___Translational Research _______Basic Research
Full Poster Title *  Colorectal Adenocarcinoma with Involvement of the Prostate: Report of 9 Cases
with Immunohistochemical Analysis and Long Term Follow Up

Where has the work been presented?
Meeting Name  __United States and Canadian Academy of Pathology (POSTER)___
Meeting Date  March 24-30, 2007____________________________________
Not Previously Presented _______________ _________________________________________
Where is this work being published? ___Modern Pathology
(SUBMITTED)__________________________________________
Journal Name, Volume, Page, Date _________________________________________________
In Preparation ________________________________________________________________
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Colorectal Adenocarcinoma with Involvement of the Prostate: Report of 9 Cases with Immunohistochemical Analysis and Long Term Follow Up

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Background: Spread of colorectal carcinoma to the prostate is rare with few case reports in the medical literature. The distinction between prostatic duct adenocarcinoma and spread of colonic adenocarcinoma to the prostate is critical but challenging, especially if the possibility of the latter is not considered on needle biopsy. We present the largest series to date on this phenomenon.

Design: 9 cases of colorectal adenocarcinoma with metastasis or direct extension to the prostate were retrieved from the consult files of one of the authors.

Results: Clinical: Mean age of patients at diagnosis was 61 years (range 42 to 78 years). 6 cases (66.7%) were initially diagnosed on needle biopsy and the others by TURP. 3 cases (33.3%) were diagnosed prior to biopsy of the colon and lead to the discovery of the colonic primary. The mean interval between the detection of the primary tumor and prostatic involvement in the other 6 cases was 30 months (range 1 to 52 months). Stage of colorectal carcinomas ranged from T1-T4 (T1=2, T2=2, T3=2 and T4=3) at primary diagnosis. 2 cases (22.2%) were associated with prostatic spread of rectal adenocarcinoma following recurrence at the anastomotic site of previous colonic cancer. 3 patients (33.3%) had simultaneous microscopic foci of usual type prostatic adenocarcinoma. Follow up was available on all patients with a mean of 29.2 months (range 3 to 88 months). 5 patients (55.5%) died of disease. Histology: Variable features were present including, necrosis n=7 (77.8%), chronic inflammatory response n=7 (77.8%), cribriform pattern n=6 (66.7%), villous architecture n=2 (22.2%), mucin production n=2 (22.2%), signet ring cells n=1 (11.1%) and perineural invasion n=1 (11.1%). Immunohistochemistry: Stains were positive for Beta-catenin in 6/6 cases (100%), CDX2 6/6 cases (100%), CEA 7/7 cases (100%), CK20 5/6 cases (83.3%), HMWCK 5/6 cases (83.3%), and Racemase 3/6 cases (50%). Stains were negative for PSA in 9/9 cases (100%), P501S (prostein) 6/6 cases (100%), and CK7 6/6 cases (100%).

Conclusions: The distinction between prostatic adenocarcinoma and spread of colorectal carcinoma to the prostate is critical in view of both therapeutic and prognostic implications. It should be considered in the differential diagnosis when there is a prostatic carcinoma with necrosis, mucin production, mucin-positive signet ring cells, villous architecture, or associated inflammation. IHC for Beta-catenin, CDX2, CEA, HMWCK, PSA, P501S, CK20 and CK7 can be helpful in making the distinction.