

The Value of Histochemical And Immunohistochemical Staining In The Differentiation Between Vesical And Prostatic Adenocarcinomas.

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Abstract:

Prostatic adenocarcinoma is rising in Iraq, now ranking ninth among men. Bladder tumours rank third among the commonest tumours.

Vesical adenocarcinoma is rare representing only 2.2% of all cases. Involvement of the prostate by a vesical tumour is shown in some literatures to be common, while the reverse is not studied yet.

In view of basically different treatment strategies of both tumours, their identification seems crucial. Both prostatic and vesical adenocarcinomas have been shown to produce mucins of different chemical properties, studying their pattern of expression may add some criteria in the differentiation between these tumours.

The recent revolution in immunohistochemical methods made this task relatively easy.

Aims of The Study:

To evaluate the immunohistochemical staining results in both prostatic and vesical adenocarcinomas, utilizing different types of monoclonal antibodies.

To assess the value of immunohistochemical staining in conjunction with mucin stains, in the differentiation between prostatic and vesical adenocarcinomas.

Patients, Materials And Methods:

Eighty-seven paraffin blocks of 61 patients were retrieved from the histopathological laboratory in the hospital of surgical specialties in the Medical City/ Baghdad, as well as a number of private laboratories, during one-year period.

Thirty eight were prostatic carcinomas and 23 were bladder tumours, 17 of which were pure adenocarcinomas and the rest were transitional cell carcinomas with glandular differentiation. All cases

were submitted for serial sections, stained histochemically with hæmatoxylin and eosin, PAS and alcian blue (AB), and immunohistochemically for PSA, PSAP, HMCK, CEA and EMA.

Results:

Prostatic tumours stained with PSA in 100% of the cases, PSAP; 97.36%, HMCK (AE3); 23.68%, LMCK (AE1); 94.37%, CEA; 7.89%, EMA; 71.07%. PAS; 44.73% and AB; 63.15%. One case of vesical adenocarcinoma stained with PSA (5.88%), PSAP in 17.64%, HMCK (AE3); 100%, LMCK (AE1); 100%, CEA; 88.23%, EMA; 82.35%, PAS; 88.23% and AB in 82.35%.

In conclusion, each of the PSA, PSAP, HMCK, CEA and PAS were valuable in the differentiation between vesical and prostatic adenocarcinomas. Although PSA is more specific for prostatic tissue than PSAP, PSAP is still of great use in this task.