Uro 13

PAPILLARY PROSTATIC CARCINOMA. TO HISTOGENESIS AND ENTITY OF SO-CALLED ENDOMETRIOID CARCINOMA.

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Investigated are 50 at least partially papillary prostatic carcinomas. According to urethroscopic and rectal palpation findings, 6 carcinomas are situated centrally in the prostate,40 tumors in the prostate proper. 4 tumors are To-carcinomas. Papillary portions of the tumors exhibit dark or light epithelium. An accompanying usual prostatic carcinoma of varying extension is found in 41 cases with transition to the papillary component in 21 cases. In 22 carcinomas,the papillary portion is also spreading in prostatic ducts. A topical relationship of the tumor to the utriculus prostaticus is demonstrable in no case. 20 of 22 tumors investigated immunohistochemically stain positively for prostatic acid phosphatase (PAP) and prostate-specific antigen (PSA) in ordinary and papillary portions. The epithelium of the utriculus of 7 patients not belonging to the present series is PAP- and PSA-positive without exception.Ordinary carcinomas of the prostate proper can develop so-called endometrioid papillary structures not differing from the usual component immunohistochemically. Papillary carcinomas in central portions of the prostate to our opinion represent morphological variants of usual carcinomas, too, obviously arising in prostatic ducts. Subdivision of papillary carcinomas in so-called endometrioid carcinomas and carcinomas of prostatic ducts is not justified to us. Papillary prostatic carcinomas should be treated like ordinary prostatic carcinoma.

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Uro 14

UROTHELIAL CARCINOMA OF THE PROSTATE.

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In our material, urothelial carcinoma of prostate comprises 4.5% of all prostatic cancers. It occurs solitarily in the prostate and combined with urothelial carcinoma of the bladder. 122 urothelial carcinomas of the prostate have been investigated, 69 cases with simultaneous involvement of the bladder, 53 cases solitarily located in the prostate. Additional usual carcinoma is found in 7 or 30 cases respectively of these groups. In the second group, adenocarcinoma preceded urothelial carcinoma or was diagnosed simultaneously, in some of these cases developing under antiandrogenic therapy. The majority of pure urothelial carcinomas are found in the stages 0-B, combined urothelial and usual carcinomas in stages B-D. Acid prostatic phosphatase is only raised in cases with combined usual prostatic carcinoma. Urothelial carcinoma is a tumor with a strong affinity to prostatic ducts. It is preferably localized in the periurethral glands, where its solitary form primarily develops. We could not observe an isolated development in peripheral glands in any case. Histologic differentiation from solid and cribriform usual prostatic carcinoma may be difficult. Urothelial carcinoma preferably develops skeleton metastases, either of osteolytic or osteoblastic nature. Usual prostatic carcinoma and urothelial carcinoma exhibit different biologic behavior. Least mentioned does not respond to endocrine therapy and bears a bad prognosis.

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Uro 15

Monoclonal Antibodies Against the Estramustin-Binding Protein Monotoring The Treatment Of Prostatic Carcinoma With Estracyt

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Estracyt is a drug combination of östrogen and Endoxan used in the treatment of advanced prostatic carcinoma. The drug is desphorylated to Estramustin and concentrated in the cytosol of the ventral prostate. It is bound there to the Estramustin-binding-protein (EMBP).
Less information is available up to now concerning the presence of EMBP in the tissue of prostatic carcinoma before and later under treatment. The aim of our study is to prove the effect of Estracyt in the treatment of of prostatic carcinoma looking at EMBP in biopsies of local tumor tissue.
In a first step EMBP from ventral prostate of the rat was purified by Leo, Sweden, using DEAE-Cellulose Chromatography, Gel Filtration on Sephadex G-100, Octyl-Sepharose Chromatography and Polyacrylamide Gel Electrophoresis. As polyspecific antisera declineate undefined of overal, than the individual antigenic determinants monoclonal antibodies against EMBP were made by the method of Köhler and Milstein. Our antibodies were designated 323, 636 and 935, and were used looking at the presence or absence of EMBP in the tumor before treatment with Estracyt. After this procedure it should be determined whether EMBP may be a useful parameter for effective treatment in prostatic carcinoma.

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Uro 16

Clinical experience with a new solid phase enzyme immunoassay for prostatic acid phosphatase

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During the last years there has been controversy concerning the value of prostatic acid phosphatase (PAP) as a tumor marker for early prostatic cancer (CaP).
We report here on a new solid phase enzyme immunoassay (EIA) for PAP with high sensitivity. The turnover rate of PAP in the conventional EIA is limited by the release of the phosphate from the active center of the enzyme. Earlier experiments have shown, that a transfer of the activated phosphate on n-butanol or n-pentanol could increase the turnover rate to about 150%. Based on these observations n-butanol was added to the assay in order to increase the sensitivity.
In this study PAP was assayed in 177 male healthy donors, 34 patients with benign prostatic hypertrophy (BPH), and 31 patients with CaP. 19 of these patients suffered from advanced CaP T_{3-4} N_{0-2} M_{0-1}, while 13 patients were regarded to have a localized CaP T_{0-2} N_0 M_0 which was confirmed pathohistologically by lymphadenectomy and radical prostatectomy in 8 patients.
The upper limit of discriminative normal values of PAP was set at 0.3 U/l. The values of the normal donors ranged from 0.01 to 0.28 U/l (mean 0.11 U/l), while the values for patients with BPH were slightly higher (0.15 to 0.28 U/l). One patient with BPH had an elevated PAP serum level (0.32 U/l) while one patient with CaP T_1 N_0 M_0 was found to have only 0.28 U/l. No correlation could be observed between tumor stage and PAP level. These results indicate that highly sensitive assays for PAP may be useful in the diagnosis of early CaP.

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