Intraductal carcinoma of the prostate without invasive carcinoma on needle biopsy: emphasis on radical prostatectomy findings.

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PURPOSE: Limited information is available on radical prostatectomy findings in men with intraductal carcinoma of the prostate on needle core biopsy in the absence of invasive prostate cancer.

MATERIALS AND METHODS: From the consulting files of one of us we identified 83 men in whom biopsy showed only intraductal prostate cancer. Followup was available in 66 cases. We reviewed slides in 21 radical prostatectomy cases.

RESULTS: Treatment was radical prostatectomy in 23 men, radiation therapy in 15, hormone therapy in 8 and radiation plus hormone therapy in 15 while 5 underwent no treatment or repeat biopsy. Of the 21 radical prostatectomies available for review findings revealed pathological stage pT3a in 8 (38%), pT3b in 3 (13%), pT2 in 8 (38%) and intraductal carcinoma without identifiable invasive cancer in 2 (10%). One patient with pT3a had a positive lymph node at surgery. Average Gleason score was 7.9. Three patients (14%) experienced post-prostatectomy biochemical failure and another (5%) had bone metastases 2.5 years after prostatectomy. In 15 prostatectomies (71%) there was extensive intraductal carcinoma, defined as greater than 10% of tumor being intraductal, including the 2 cases of intraductal carcinoma only. Of the 19 prostatectomies with invasive adenocarcinoma 16 (84%) were conventional acinar adenocarcinoma, 2 (11%) ductal adenocarcinoma, and 1 (5%) mixed ductal and acinar adenocarcinoma.

CONCLUSIONS: At radical prostatectomy men in whom prior biopsies showed only intraductal carcinoma of the prostate typically have high grade (Gleason score 7 or greater) invasive adenocarcinoma and most have advanced stage disease (pT3). Definitive therapy is recommended in men with intraductal carcinoma of the prostate on needle biopsy even in the absence of pathologically documented invasive prostate cancer.

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