

PROSTATE BIOPSY TRENDS. Roberto Orozco, Gerard O'Dowd, Binitha

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Background: Results from prostate biopsies (pbxs) contain information that permits an early evaluation of the current efforts to detect more curable prostate cancers. The purpose of this work was to search for trends in a large prostate biopsy database.

Design: A retrospective analysis of 62,536 pbxs from patients (pts) with no history of previous prostate sampling, received between April 95 and March 97, was conducted. Results were grouped by month and changes were searched for over time. Changes in age, sampling, diagnostic rates, number of prostate locations involved by cancer per bx, percent of tissue length involved by tumor per bx, percent of positive cases with Gleason grades 4 & 5, and percent of cases with abnormal (non-diploid) DNA result.

Results: The mean age for all pts was 67.8 yr. and for those with cancer was 69.8 yr. Both means declined by < 1yr. Pts undergoing pbx < 60 yr. of age increased by 2%. The percent of sextant bxs increased by 10%. The positive rate was 38.2% and ranged from 36.1 to 39.7% but showed no clear change in trend. Atypical acini suspicious for cancer and high grade prostatic intraepithelial neoplasia were identified in 2.9% and 5.1% of bxs and neither demonstrated a trend. Percent of cancer cases with abnormal DNA ranged from 50 to 59% but showed no trend. The mean number of prostate samples (core/s) involved by tumor (2.8) per bx and the percent of cases with a given number of samples involved by tumor did not change. Mean bx length involved by tumor decreased from 23 to 18%. Cases with Gleason grades 4 & 5 decreased by 10%.

Conclusions: The study shows that systematic sampling of the prostate and pts < 60 yr. undergoing pbxs are increasing. It also shows a decrease in two important bx findings, the mean percent of bx length involved by tumor and the percent of cases with Gleason grades 4 and 5. The last two changes would suggest earlier detection of cancer which should result in improved prognosis.