

Prostate Biopsy

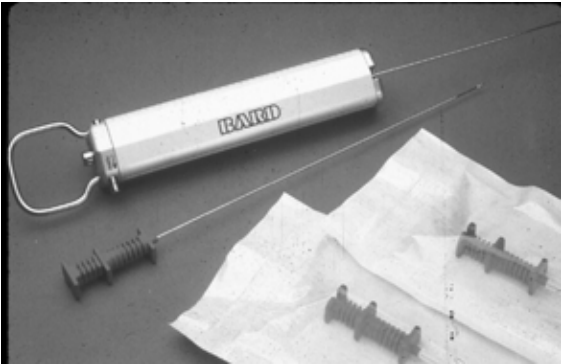
A prostate biopsy needle device in the hands of a Urologist !

Willet F. Whitmore Jr.

Prostate Biopsy

A prostate biopsy needle device in the hands of a Urologist !

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Prostate Cancer

prevalence

disease in a population

incidence

disease diagnosed in a population

Prostate Cancer Prevalence

210 patients		4696 patients
0	20-29	0
0	30-39	0.2%
0	40-49	3.8%
29%	50-59	6.4%
30%	60-69	12.5%
40%	70-79	17.4%
67%	80-89	26.1%
100%	90+	

Franks 1954 Scott 1968

Prostate Cancer Prevalence

violent death series

Detroit

	Caucasian	Afro-American
20 - 29	0/6	0/28
30 - 39	6/26 23%	9/29 31%
40 - 49	11/29 38%	20/37 54%

Sakr 1993

Prostate Cancer Prevalence

PSA	% positive	G 8, 9
< 0.5	32/486 6.6%	4/ 32 12.5%
0.6-1.0	80/791 10.1%	8/ 80 10%
1.1-2.0	170/998 17.0%	20/170 11.8%
2.1-3.0	115/482 23.9%	22/115 19.1%
3.1-4.0	52/193 26.9%	13/ 52 25%

Thompson NEJM 350:2239, 2004

Screening

AIMs

- identify asymptomatic men
- with aggressive, localized tumors,
- treat them,
- reduce morbidity, LUTs,
- reduce metastases, [painful]
- reduce mortality,

Screening

???? rectal exam
 1936 acid phosphatase
 1941 DRE + acid p'tase
 1966 human semino-protein
 1979 Prostate Specific Antigen
 1930s perineal; 1937 rectal bx

Screening

prostate specific antigen
 Free / Total PSA; cPSA [2-6]
 PSA velocity
 PSA density
 PSA age specific
 PSA doubling time

PSA – Age specific

40 – 44 1.8 ng/ml
 45 – 49 2.0 ng/ml
 50 – 54 2.6 ng/ml
 55 – 59 3.6 ng/ml
 60 - 64 4.3 ng/ml
 65 – 69 5.0 ng/ml
 70 – 75 5.5 ng/ml

Crawford PCAW

PSA – Age specific

40 – 44	1.8 ng/ml	Cau	AA
45 – 49	2.0 ng/ml	2.5	2.0
50 – 54	2.6 ng/ml		
55 – 59	3.6 ng/ml	3.5	4.0
60 - 64	4.3 ng/ml		
65 – 69	5.0 ng/ml	3.5	4.5
70 – 75	5.5 ng/ml	3.5	5.5

Crawford PCAW
 JAMA

Moul

