

Introduction

Introduction Slide 1 3D model of prostate
Introduction Slide 2 Cancer of prostate (text)

Key Histologic Points

Key Points Slide 1 Introduction (text)
Key Points Slide 2 Normal epithelium
Key Points Slide 3 EM of normal epithelium
Key Points Slide 4 Apocrine secretion of normal epithelium
Key Points Slide 5 Ragged luminal border of normal epithelium
Key Points Slide 6 Cell height variation in normal epithelium
Key Points Slide 7 Stroma of normal prostate
Key Points Slide 8 Stroma of normal prostate
Key Points Slide 9 Stroma stained with Trichrome
Key Points Slide 10 Malignant glands within normal appearing stroma
Key Points Slide 11 High power view of previous slide
Key Points Slide 12 Normal Epithelium/Stroma (text)

Grading of Carcinoma

Data on the Gleason System

Gleason System Slide 1 Introduction (text)
Gleason System Slide 2 Mortality vs Grade-Sum (graph)
Gleason System Slide 3 Mortality vs Grade-Sum (graph)
Gleason System Slide 4 Gleason series vs Stanford series (graph)
Gleason System Slide 5 Failure Rate vs. Percent of Grade 4/5 (graph)
Gleason System Slide 6 Normal Gland Unit (diagram)
Gleason System Slide 7 Gleason Grade Boundary (text)

Distinguishing Grades 3 & 4

Grade 3 /4 Split Slide 1 Introduction (text)
Grade 3 /4 Split Slide 2 Grade 3
Grade 3 /4 Split Slide 3 Grade 4
Grade 3 /4 Split Slide 4 Grade 3 to 4 evolution
Grade 3 /4 Split Slide 5 Cell sheets with lumens
Grade 3 /4 Split Slide 6 Cell sheets with papillary processes
Grade 3 /4 Split Slide 7 Cribriform pattern
Grade 3 /4 Split Slide 8 Clear cell pattern, glomeruloid structures
Grade 3 /4 Split Slide 9 Epithelial sheets surrounding stromal core
Grade 3 /4 Split Slide 10 Subtle Grade 4
Grade 3 /4 Split Slide 11 Higher power of previous slide
Grade 3 /4 Split Slide 12 Difficult Grade 4 diagnosis
Grade 3 /4 Split Slide 13 Grade 3 and 4
Grade 3 /4 Split Slide 14 Vacuole in Grade 4
Grade 3 /4 Split Slide 15 Luminal mucin
Grade 3 /4 Split Slide 16 Mucin producing Grade 4
Grade 3 /4 Split Slide 17 Mucin lakes
Grade 3 /4 Split Slide 18 Signet ring cell carcinoma
Grade 3 /4 Split Slide 19 Cell packets in Grade 4
Grade 3 /4 Split Slide 20 Strange pattern Grade 4
Grade 3 /4 Split Slide 21 Glands with septa, glomeruloid pattern
Grade 3 /4 Split Slide 22 Stroma dominant Grade 4

Grades 1,2,5

Grades 1,2,5 Slide 1 Grade 5 featureless

Grades 1,2,5 Slide 2 Grade 5
Grades 1,2,5 Slide 3 Subgroup of Grade 5
Grades 1,2,5 Slide 4 Comedocarcinoma
Grades 1,2,5 Slide 5 Grade 3 dark cells
Grades 1,2,5 Slide 6 Grade 3 clear cells
Grades 1,2,5 Slide 7 Grade 1 vs Grade 2
Grades 1,2,5 Slide 8 Grade 1 vs 2
Grades 1,2,5 Slide 9 Higher power of previous slide
Grades 1,2,5 Slide 10 Gleason Grade 4 vs 1,2 (text)

Intraductal Carcinoma (IDC)

Definition

IDC Definition Slide 1 Introduction (text)
IDC Definition Slide 2 Intraductal Carcinoma Patterns
IDC Definition Slide 3 Cribriform dysplasia, PIN
IDC Definition Slide 4 Spread into large ducts, urethral lumen
IDC Definition Slide 5 Peripheral spread towards capsule

Dysplasia (PIN)

Dysplasia Slide 1 Introduction (text)
Dysplasia Slide 2 Dysplasia evolving to Grade 3
Dysplasia Slide 3 Higher power of previous slide
Dysplasia Slide 4 Dysplastic duct with corpus amylaceum
Dysplasia Slide 5 Cancer gland arising from dysplastic duct
Dysplasia Slide 6 PSA: Normal vs Dysplasia, Cancer
Dysplasia Slide 7 Collage of dysplasia articles (text)
Dysplasia Slide 8 Intraepithelial Neoplasia in other organs (text)
Dysplasia Slide 9 Dysplasia in ducts and acini
Dysplasia Slide 10 Nuclear crowding in dysplasia
Dysplasia Slide 11 Normal basal cell layer
Dysplasia Slide 12 Severe loss of basal cells
Dysplasia Slide 13 Intact basal cells in dysplasia
Dysplasia Slide 14 Uniform nuclei in dysplasia
Dysplasia Slide 15 Variable nuclei in dysplasia
Dysplasia Slide 16 Dysplasia summary (text)

Origin & Evaluation of IDC-P

Origin IDC Slide 1 Introduction (text)
Origin IDC Slide 2 Dysplasia evolution to IDC
Origin IDC Slide 3 Normal vs Dysplasia
Origin IDC Slide 4 Dysplasia vs IDC
Origin IDC Slide 5 IDC origin as narrow strands
Origin IDC Slide 6 Higher power of previous slide
Origin IDC Slide 7 Micropapillary dysplasia vs IDC
Origin IDC Slide 8 Two cell layer thick anastomoses
Origin IDC Slide 9 IDC with early trabeculae formation
Origin IDC Slide 10 More extensive IDC
Origin IDC Slide 11 Cribriform and solid IDC
Origin IDC Slide 12 IDC with narrow stromal bands
Origin IDC Slide 13 Basal cell specific keratin immunostain
Origin IDC Slide 14 Grading IDC, Pattern C
Origin IDC Slide 15 IDC Pattern C

Origin IDC Slide 16 Basal cell specific cytokeratin stain
Origin IDC Slide 17 IDC Pattern C variant with necrosis
Origin IDC Slide 18 High power view previous slide

Significance & Ddx of IDC-P

Sig & Ddx IDC Slide 1 Introduction (text)
Sig & Ddx IDC Slide 2 IDC spread to urethra
Sig & Ddx IDC Slide 3 IDC producing invasive foci
Sig & Ddx IDC Slide 4 IDC giving rise to Grade 3 and 4 Ca
Sig & Ddx IDC Slide 5 Massive perineural invasion
Sig & Ddx IDC Slide 6 Evolution of Prostate Cancer (diagram)
Sig & Ddx IDC Slide 7 Ddx with Transitional Cell Ca
Sig & Ddx IDC Slide 8 Transitional Cell Ca with necrosis
Sig & Ddx IDC Slide 9 Ddx with cribriform, trabecular BPH
Sig & Ddx IDC Slide 10 High Power View cribriform BPH
Sig & Ddx IDC Slide 11 Ddx with Basal Cell hyperplasia
Sig & Ddx IDC Slide 12 Cribriform Basal Cell Hyperplasia
Sig & Ddx IDC Slide 13 Basal Cell Hyperplasia
Sig & Ddx IDC Slide 14 Basal Cell Hyperplasia
Sig & Ddx IDC Slide 15 Basal cell specific keratin immunostain
Sig & Ddx IDC Slide 16 Significance of IDC Prostate (text)

Needle Biopsy Diagnosis

Cytologic Criteria

Needle Bx Cytology Slide 1 Introduction (text)
Needle Bx Cytology Slide 2 Needle core experiment
Needle Bx Cytology Slide 3 Cancer within prostatectomy specimen
Needle Bx Cytology Slide 4 Cancer within needle core
Needle Bx Cytology Slide 5 Artifact in needle core biopsies
Needle Bx Cytology Slide 6 Interpretable undamaged areas
Needle Bx Cytology Slide 7 Damaged non-diagnostic areas
Needle Bx Cytology Slide 8 Benign gland proliferation
Needle Bx Cytology Slide 9 Malignant gland
Needle Bx Cytology Slide 10 Benign glands
Needle Bx Cytology Slide 11 Carcinoma with basal nuclei
Needle Bx Cytology Slide 12 Corkscrew pattern in carcinoma
Needle Bx Cytology Slide 13 Tubule growth along long axis
Needle Bx Cytology Slide 14 Normal vs Malignant Epithelium (diagram)
Needle Bx Cytology Slide 15 Normal vs Malignant Clear Cells (diagram)
Needle Bx Cytology Slide 16 Cytokeratin of normal epithelium
Needle Bx Cytology Slide 17 Cytokeratin condensation in Ca
Needle Bx Cytology Slide 18 Normal epithelium cytokeratin stain
Needle Bx Cytology Slide 19 Clear Cell Carcinoma cytokeratin stain
Needle Bx Cytology Slide 20 Carcinoma with dark cells
Needle Bx Cytology Slide 21 Normal vs Carcinoma
Needle Bx Cytology Slide 22 Summary (text)

Ancillary Cancer Criteria

Ancillary Criteria Slide 1 Pyknotic apoptotic nuclei
Ancillary Criteria Slide 2 Pyknotic nuclei in cancer
Ancillary Criteria Slide 3 Luminal crystalloid and sludge
Ancillary Criteria Slide 4 Mucin secretion Alcian Blue stain
Ancillary Criteria Slide 5 Mucin secretion in carcinoma
Ancillary Criteria Slide 6 Stromal micronodule

Ancillary Criteria Slide 7 Formation of stromal micronodule
Ancillary Criteria Slide 8 Stromal micronodule on stalk
Ancillary Criteria Slide 9 Nerves within micronodule
Ancillary Criteria Slide 10 Numerous stromal micronodules
Ancillary Criteria Slide 11 Desmoplasia in cancer
Ancillary Criteria Slide 12 Desmoplasia in center of cancer
Ancillary Criteria Slide 13 Buildup of desmoplasia
Ancillary Criteria Slide 14 Normal stroma and desmoplasia
Ancillary Criteria Slide 15 Cancer with normal stroma
Ancillary Criteria Slide 16 Summary (text)
Ancillary Criteria Slide 17 Small suspicious glands
Ancillary Criteria Slide 18 Increasingly suspicious glands
Ancillary Criteria Slide 19 Mucin secretion present
Ancillary Criteria Slide 20 Malignant nuclei and mucin

Cancer vs. Hyperplasia

Ca vs Hyperplasia Slide 1 Introduction (text)
Ca vs Hyperplasia Slide 2 Grade 3 cancer
Ca vs Hyperplasia Slide 3 High power of previous slide
Ca vs Hyperplasia Slide 4 Benign cluster of glands
Ca vs Hyperplasia Slide 5 High power of previous slide
Ca vs Hyperplasia Slide 6 Benign and malignant glands
Ca vs Hyperplasia Slide 7 Benign focus
Ca vs Hyperplasia Slide 8 Malignant area
Ca vs Hyperplasia Slide 9 BPH vs Lobular hyperplasia (diagram)
Ca vs Hyperplasia Slide 10 Lobular hyperplasia
Ca vs Hyperplasia Slide 11 Lobular hyperplasia at high power
Ca vs Hyperplasia Slide 12 Focal and diffuse lobular hyperplasia
Ca vs Hyperplasia Slide 13 Lobular hyperplasia at high power
Ca vs Hyperplasia Slide 14 Clear cell proliferation
Ca vs Hyperplasia Slide 15 Mucin accumulation in lumen
Ca vs Hyperplasia Slide 16 Grade 3 + 4 cancer
Ca vs Hyperplasia Slide 17 Suspicious focus
Ca vs Hyperplasia Slide 18 Benign at high power
Ca vs Hyperplasia Slide 19 Suspicious area
Ca vs Hyperplasia Slide 20 Grade 4 cancer
Ca vs Hyperplasia Slide 21 Fragmented cribriform Grade 4
Ca vs Hyperplasia Slide 22 Mucinous lakes in Grade 4
Ca vs Hyperplasia Slide 23 Complex gland, Grade 4
Ca vs Hyperplasia Slide 24 Vacuole Grade 4
Ca vs Hyperplasia Slide 25 Signet ring cells, Grade 4
Ca vs Hyperplasia Slide 26 Signet ring cells, Grade 4

Cancer vs. Atrophy

Ca vs Atrophy Slide 1 Atrophic glands
Ca vs Atrophy Slide 2 Atrophic glands
Ca vs Atrophy Slide 3 Atrophic glands
Ca vs Atrophy Slide 4 Cancer and atrophic glands
Ca vs Atrophy Slide 5 Cancer and atrophic glands
Ca vs Atrophy Slide 6 Seminal vesicle nuclei
Ca vs Atrophy Slide 7 Seminal vesicle fibrillar secretion
Ca vs Atrophy Slide 8 Seminal vesicle pigment
Ca vs Atrophy Slide 9 Intraductal carcinoma
Ca vs Atrophy Slide 10 Grade 4 carcinoma

Ca vs Atrophy Slide 11 Dysplasia (PIN)
Ca vs Atrophy Slide 12 Biopsy vs Radical (graph)

Transition Zone Lesions

BPH

BPH Slide 1 Introduction (text)
BPH Slide 2 Introduction (text)
BPH Slide 3 Prostate anatomy (diagram)
BPH Slide 4 Oblique coronal view (diagram)
BPH Slide 5 Oblique coronal view x4
BPH Slide 6 BPH saggital view (diagram)
BPH Slide 7 BPH whole mount
BPH Slide 8 BPH plaster model (3D model)
BPH Slide 9 BPH plaster model (3D model)
BPH Slide 10 Transition vs Peripheral zone
BPH Slide 11 Genesis & Evolution (text)
BPH Slide 12 Multiple nodules, gross
BPH Slide 13 Individual nodules, gross
BPH Slide 14 BPH growth (diagram)
BPH Slide 15 BPH duct branching
BPH Slide 16 Nodule formation
BPH Slide 17 Small nodule
BPH Slide 18 Stromal periurethral nodule
BPH Slide 19 Stromal nodule
BPH Slide 20 BPH origin (text)
BPH Slide 21 Nodule expansion
BPH Slide 22 Glandular regression
BPH Slide 23 Cystic, fibrotic nodules
BPH Slide 24 BPH evolution (text)
BPH Slide 25 TURP (diagram)
BPH Slide 26 Post TURP specimen
BPH Slide 27 Post TURP specimen

Clear Cell Carcinoma

Clear Cell Ca Slide 1 Introduction (text)
Clear Cell Ca Slide 2 BPH nodule
Clear Cell Ca Slide 3 High power of previous slide
Clear Cell Ca Slide 4 Transition zone carcinoma
Clear Cell Ca Slide 5 Transition zone carcinoma x4
Clear Cell Ca Slide 6 Transition zone carcinoma
Clear Cell Ca Slide 7 malignant nodules
Clear Cell Ca Slide 8 HP view of previous slide
Clear Cell Ca Slide 9 Malignant nuclei
Clear Cell Ca Slide 10 Invasive Clear Cell carcinoma
Clear Cell Ca Slide 11 Grade 4 carcinoma
Clear Cell Ca Slide 12 Grade 4 with clear cells
Clear Cell Ca Slide 13 Glomeruloid pattern
Clear Cell Ca Slide 14 Evolution to Grade 4
Clear Cell Ca Slide 15 Summary (text)

Adenosis: AAH

Adenosis Slide 1 Introduction
Adenosis Slide 2 Example of AAH
Adenosis Slide 3 HP view of previous slide

Adenosis Slide 4 Suspicious area
Adenosis Slide 5 Malignant area
Adenosis Slide 6 Adenosis to cancer
Adenosis Slide 7 HP view of previous slide
Adenosis Slide 8 Evolution of adenosis to cancer
Adenosis Slide 9 Luminal crystalloid
Adenosis Slide 10 Corpora amylacea
Adenosis Slide 11 Cytokeratin condensation
Adenosis Slide 12 Dysplasia
Adenosis Slide 13 Summary (text)

Adenocarcinoma: Peripheral Zone

Limits of Spread of Cancer

Limits of Spread Slide 1 Introduction (text)
Limits of Spread Slide 2 Introduction (text)
Limits of Spread Slide 3 Peripheral zone ca, gross
Limits of Spread Slide 4 Transition zone ca, gross
Limits of Spread Slide 5 Peripheral zone ca, whole mount
Limits of Spread Slide 6 Transitional zone ca, whole mount
Limits of Spread Slide 7 Transitional zone ca (diagram)
Limits of Spread Slide 8 Peripheral zone ca, whole mount

Anatomy of Cancer Spread

Anatomy of Ca Spread Slide 1 Introduction (text)
Anatomy of Ca Spread Slide 2 Anatomy x4
Anatomy of Ca Spread Slide 3 Anatomy (3D models)
Anatomy of Ca Spread Slide 4 Anatomy (3D models)
Anatomy of Ca Spread Slide 5 Saggital view
Anatomy of Ca Spread Slide 6 Central zone architecture
Anatomy of Ca Spread Slide 7 Central zone architecture
Anatomy of Ca Spread Slide 8 Peripheral zone architecture
Anatomy of Ca Spread Slide 9 Lumens of Central vs Peripheral zone
Anatomy of Ca Spread Slide 10 Zone comparison
Anatomy of Ca Spread Slide 11 Central zone nuclei
Anatomy of Ca Spread Slide 12 Peripheral zone nuclei
Anatomy of Ca Spread Slide 13 Peripheral zone ducts & acini
Anatomy of Ca Spread Slide 14 Peripheral zone ducts & acini
Anatomy of Ca Spread Slide 15 Transition, Peripheral zone boundaries
Anatomy of Ca Spread Slide 16 Muscle bundles in Peripheral zone
Anatomy of Ca Spread Slide 17 Cancer spread (diagram)
Anatomy of Ca Spread Slide 18 Summary (text)

Capsule Penetration

Capsule Penetration Slide 1 Introduction
Capsule Penetration Slide 2 Capsule penetration (diagram)
Capsule Penetration Slide 3 Capsule penetration
Capsule Penetration Slide 4 Desmoplasia
Capsule Penetration Slide 5 Anatomy (diagram)
Capsule Penetration Slide 6 S100 immunostain for nerves
Capsule Penetration Slide 7 Superior pedicle nerves and fat
Capsule Penetration Slide 8 Nerve invasion (diagram)
Capsule Penetration Slide 9 Perineural invasion
Capsule Penetration Slide 10 Perineural invasion
Capsule Penetration Slide 11 Bulky perineural invasion

Capsule Penetration Slide 12 Peripheral zone ca (plaster model)
Capsule Penetration Slide 13 Peripheral zone ca (plaster model)
Capsule Penetration Slide 14 Peripheral zone ca (plaster model)
Capsule Penetration Slide 15 Summary (text)

Positive Surgical Margins

Positive Margins Slide 1 Introduction (text)
Positive Margins Slide 2 Extracapsular spread (text)
Positive Margins Slide 3 Denonvillier's fascia (diagram)
Positive Margins Slide 4 Denonvillier's fascia, gross
Positive Margins Slide 5 Tumor in Denonvillier's fascia
Positive Margins Slide 6 Tumor in Denonvillier's fascia
Positive Margins Slide 7 Tumor next to seminal vesicle
Positive Margins Slide 8 High power of previous slide
Positive Margins Slide 9 Denonvillier's fascia summary (text)
Positive Margins Slide 10 Margins at Apex
Positive Margins Slide 11 Examination of Apex
Positive Margins Slide 12 Apex summary (text)

Vascular Invasion

Vascular Invasion Slide 1 Introduction (text)
Vascular Invasion Slide 2 Vascular invasion
Vascular Invasion Slide 3 Vessel invasion
Vascular Invasion Slide 4 CD31 immunostain
Vascular Invasion Slide 5 Tumor floating in vessel
Vascular Invasion Slide 6 Smooth surface of tumor
Vascular Invasion Slide 7 Beveled edge of vessel
Vascular Invasion Slide 8 Artifactual space
Vascular Invasion Slide 9 Multiple artifactual spaces
Vascular Invasion Slide 10 Progression vs Ca Volume (graph)
Vascular Invasion Slide 11 Summary (text)

Cancer Volume and Spread

Introduction
Ca volume vs Grade 4/5 (graph)
Cancer volume (diagram)
Summary (text)