Pathology (ranges from very benign to malignant and surgical emergencies)

- Penis
 - STDs (refer)
 - o Ambiguous Genitalia, Delayed/Precocious Puberty

Drug

0

- Erectile Dysfunction (ED) aka Impotence
 - Anatomy: arteries in ventral corpus spongiosum enter sinusoids surrounded by smooth muscle in dorsal corpora cavernosa then enter veins in ventral corpus spongiosum
 - Physiology
 - Flaccid (sinusoid smooth muscles contract preventing engorgement with blood, PDE-5 degraded cGMP to GMP)
 - **Erection** (sinusoid smooth muscles relax allowing engorgement with blood, parasympathetic mediated, increase NO results in increased cGMP)
 - Ejaculation (sympathetic mediated) "Point & Shoot"
 - Causes
 - Psychogenic: anxiety/depression, etc (Sudden Onset, Situational, Present Nocturnal / Morning Erections (aka daytime w/o thinking about it) but when one tries he can't, Decreased Libido)
 - Organic: neurogenic (diabetes, Parkinson's, MS), endocrine (hypogonadism), vascular (smoking, inactivity, atherosclerosis), drug induced (alcohol and any illicit drug, antidepressants, sympathetic blockers), etc (Gradual Onset, Progressive, Absent Nocturnal / Morning Erections, Normal Libido)
 - י Dx
- Labs (check testosterone if nl then pursue non-hypogonadism causes above otherwise if low (<200ng/dL) there pursue hypogonadism causes below)
- Nocturnal Penile Tumescence Test (gauges on penis measure number, duration, rigidity of erections during REM and is used to determine if nocturnal erections are present suggesting a psychogenic vs organic cause)
- Cavernosography/Cavernosometry/Arteriography (measures pressure/flow and vessel anatomy if concerned about vessel dz)
- Intracorporeal Injections of Vasoactive Substances (papaverine, phentolamine, PGE-E) if elicits an
 erection then not venous
- Duplex US which measures arterial flow and venous drainage

PDE5 Inhibitors (SEs: priapism, hypotension esp when concurrently taking nitrates, HAs, flushing, dyspepsia, blue vision (only Viagra), reports of ischemic optic neuritis)

- Sildenafil (Viagra) (onset in <1hr & lasts 4hrs, always start w/ this first as cheapest and shortest duration b/c if pt has SEs then you don't want pt to
- have them when taking Cialis b/c they will last 36hrs, only when SEs do exist do you consider Levitra and only when pt has been on Viagra and tolerating it and they want more convenience then consider Cialis)
- Vardenafil (Levitra) (just like Viagra but can take with alcohol and less blue vision)

• Tadalafil (Cialis) (onset in <2hrs & lasts 36hrs) Yohimbine

- Testosterone
- Injection Therapy: alprostadil, phentolamine, papaverine (SEs: very effective but r/o fibrosis/priapism)
- Devices: implants, vacuums w/ ring to hold in place, etc
- Hypo-/Epi-spadias: abnormal distal urethral orifice along either aspect of penis shaft (hypo/below/ventral vs epi/above/dorsa), sometimes orifice is constricted resulting in UTIs, hypo increase r/o crypto vs epi increase r/o incontinence, Tx: surgery
- Phimosis: prepuce aka foreskin cannot retract over glans due to congenital (seen in infants) or secondary (seen in elderly) scarring, Tx: lubrication, steroid cream then circumcision NB called paraphimosis when 2/2 venous congestion, can progress to gangrene
- Balanititis: inflammation of the glans 2/2 poor hygiene in uncircumcised males resulting in accumulation of smegma (desquamated epithelial cells, sweat, debris, etc) which acts as an irritant, NB called balanoposthitis when it includes the prepuce
- **Peyronie's Disease**: inflammation of the shaft of the penis that causes scar tissue to form beneath the skin of the penis resulting in difficulty and pain in achieving an erection and causing the penis to curve upward during an erection
- **Priapism**: intractable painful erection 2/2 venous thrombosis of corpora cavernosa 2/2 low flow state (leukemia, drugs, SCD, impotence Tx gone wrong) vs high flow state (pudendal artery fistula) Tx: emergent blood aspiration
- Squamous Cell Carcinoma: begins as CIS aka Bowen's Disease (when involving the penis it is called Erythroplasia of Queyrat), RFs: poorly hygienic, uncircumcised, elderly male
- **Pearly Penile Papules** (papules distributed around corona, seen in 20% of pts, not significant but often scary to pts, DDx: Condyloma and Molluscum)
- Prostate

- Prostate Neoplasm (refer)
- o BPH (refer)
- Prostatitis (dysuria, urinary frequency, lower back pain, and poorly localized suprapubic pain, exquisitely tender prostate on DRE suggests acute while enlarged and mildly tender suggests chronic, avoid unnecessary massaging as can cause bacteremia, DDx: prostactodynia, non-bacterial prostatitis, etc, Dx: UA = sheets of WBC, EPS (Expressed Prostatic Secretions from massage) = WBCs, UC = +)
 - Acute: less common, young male, more serious, symptomatic, caused by bacterial UTI (esp. *E.coli* Chlamydia, and other G-rods) therefore most prostatis has concomitant urethra and urinary bladder infection b/c the prostate acquired the bacteria direct extension, Tx: Bactrim or FQ x1mo
 - Chronic: more common, old male, less serious, asymptomatic, may follow acute or develop insidiously w/o
 previous acute infection, serves as reservoir for bugs therefore it is one of the most important causes of
 recurrent UTI, Tx: same x2mo b/c recurrence is common

Scrotum

- Mass (solid and thus opaque on transillumintation vs cystic and thus transparent on transillumination, separate from testicle)
 - Neoplasm (in testicle)
 - -celes (adjacent to testicle)
 - Hydrocele: accumulation of serous fluid in tunica vaginalis from infection, tumor, or idiopathic
 - Varicocele: accumulation of blood in veins ("bag of worms")
 - Chylocele: accumulation of lymph in lymphatics
 - Elephantiasis (massive chylocele due to lymphatic obstruction resulting in massive balls and lower extremity edema)
 - Hernias (separate from testicle)
- o Pain

Torsioned Testicle: any pt w/ scrotal pain must be ruled out for torsion, twisting of the spermatic cord resulting in obstruction of the vein (blood goes in but can't come back out) leading to hemorrhagic infarct manifesting as sudden, SEVERE unilateral pain and sudden increase in size and elevated testicle b/c as it twists the testicle moves up, there is often inflammation of the affected testicle on PEx, along w/ N/V ab pain, two peaks (neonatal and young adult), often occurs after vigorous exercise/minor trauma, <6hrs best results vs 6-24hrs variable vs >24hrs infarction, surgical emergency requiring immediate untorsion "open the book" and orchiepexy if >24hrs then orchiectomy, once the testicle is found to be viable then perform bilateral orchidopexies to hold the testicles in place to prevent future episodes as these obviously are at risk Epididymitis (more common) or Orchitis (less common) unlike torsion pain is more gradual, bilateral, less severe and additional Sx consistent w/ UTIs testicular or epididymis inflammation due to UTI that then secondarily ascends vas deferens or lymphatics, *N. gonorrhea, C. trachomatis, E. coli, TB,* mumps, Findings: swollen, tender either testicle aka orchitis or epididymis granulomatous reaction with caseous necrosis (TB)

- Other
 - Testicular Atrophy: Usually unknown but can be caused by: (1) orchitis (2) trauma (3) change in hormone levels (4) cryptorchidism (5) Klinefelters (6) old age

Cryptorchidism: failure of testis to descend due to hormonal abnormalities, intrinsic testicular problem, mechanic problem, associated with congenital syndromes (Prader-Willi Syndrome), usually cause is unknown;
 results in testicular atrophy and thus infertility and more importantly 4x INCREASED RISK FOR TESTICUALR MALIGNANCY and also torsion/hernias/infertility, there is also r/o cancer in the normal descended testis, Tx: orchiopexy (decreases r/o torsion/hernias/infertility, DDx: retractile testis (exaggerated cremasteric reflex) vs just absent testis

- Hypogonadism
 - Etiology
 - Primary (increased LH and FSH, seen in young males)
 - Genetic: Klinefelter's Syndrome (refer), Y-Chromosome Microdeletions,
 - Cryptochordism, Testosterone Biosynthetic Defects, LH/CG Receptor Defects
 - Gonad Damage: radiation, chemo, torsion, surgery esp hernia repair, infection (mumps, leprosy, etc), cryptochordism, autoimmune
 - Secondary (decreased LH and FSH, seen in adult males)
 - o Genetic: Kallmann's Syndrome (refer)
 - HP Damage (refer) or any type of systemic illness can affect the HP axis
 - Androgen Deficiency in the Aging Male (ADAM) (normal LH and FSH, seen in elderly males)

- S/S: decreased muscle mass, OP, slowing of facial hair growth, small/soft testis, increase in central body fat, decreased libido, ED, decreased energy, cognitive impairment, change in mood, anemia, overall decreased sense of well-being
- Dx: Total Testosterone (TT) = 60% tightly bound to SHBG (serving as a reservoir) + 40% weakly bound to albumin (serving to steady testosterone levels despite pulse LH) + 2% free (NB Bioavailable Testosterone (BT) = albumin bound and free, and in most cases TT reflects BT if SHBG is normal)
 - 1st: Screen w/ TT and + if decreased pooled AM (@0800, @0830, @0900) Total Testosterone (TT) <200ng/dL or 200-350ng/dL + S/S (NB increasing testosterone levels in man who has S/S but TT >350ng/dL will do NOTHING to improve S/S)
 - 2nd: Confirm w/ BT
 - 3rd: unlike other hormone problems you don't screen with the stimulating hormone (TSH, ACTH, etc) rather you look at the testosterone but once confirmed then determine if Secondary/Primary by measuring FSH/LH and Prolactin
- Τх
- IM (most experience, cheap, must be injected by MD Q2wks, significant peak/troughs)
- Patch (5mg Qpm w/ peak ~6hrs later and then slow decline, skin irritation can be minimized by smearing 0.1% triamcinolone cream to the patch before application)
- Gel (hard to titrate, 5g of 1% gel applied diffusely over trunk/shoulders Qd, after a week there is a reservoir in the skin such that levels of testosterone are constant w/ no peak/troughs, must protect site from water and contact with other people)
- Buccal Pellet (little experience, awkward to use, peak at 12hrs)
- NB PO does not exist b/c first pass hepatic flow is very toxic to liver causing cancer
- NB monitor AM TT, Hct for Polycythemia, PSA/DRE for BPH/PC and expect a rise no more than 50% in 2yrs, FLP for DL, S/S of OSA prior to Tx and 1,3,6,12mo and then Qyr,
 - NB if secondary hypogonadism then Tx is based on Tx underlying cause and if fertility is a problem some also add on pulsatile GnRH
- Infertility 0
 - Hypogonadism
 - Abnormal Sperm Count/Qual
 - **Ductal Obstruction** Impotence

Testicular Neoplasm

- Epidemiology
 - Incidence: 9k/yr but only 350deaths/yr 0
 - representing 1% of all male cancers, increasing in incidence by 1%/yr but mortality is decreasing, most common solid tumor in men b/t 20-35yo
 - Age: three age peaks (infancy, 25-40, 60yo) 0
 - RFs: race (W>B), +FHx, cryptochordism (4x, NB even surgical correction does not eliminate risk rather some 0 evidence suggests increased risk), testicular dysgenesis as in Klinefelter's, HIV (emerging RF), genetic abnormality i(12p), if one testis has cancer the other is at higher risk
 - Malignancy DDx
 - Alexander Mantas MD PA Germ Cell Tumor (~100%) 0
 - Seminoma (~60yo, 50%, radiosensitive, less aggressive, ONLY beta-hCG NO AFP)
 - Non-Seminoma (25-40yo, 50%, non-radiosensitive, more aggressive, variable beta-hCG and AFP hence AFP can be used to differentiate seminomas from non-seminomas)
 - Embryonal Carcinoma (97% of time it is part of mixed tumor, 50% beta-hCG, 25% AFP) .
 - Yolk-Sac / Endodermal Sinus Tumor (100% + AFP. Variable beta-hCG) •
 - Choriocarcinoma (100% + beta-hCG, Variable AFP)
 - Teratoma (mature are benign vs immature are malignant) all three germ-layers with varying degrees of differentiation (neural, glandular, cartilaginous, squamous epithelial tissue, etc, NO beta-hCG, 25% AFP)
 - NB Mixed Tumors which are combinations of the above are very common and if so you consider them non-seminomas in terms of Tx
 - Stromal Sex Cord Tumors (rare) 0
 - Leydig: often produce androgens, estrogens, corticosteroids, etc
 - Sertoli: don't often produce hormones
 - Lymphoma (rare) especially if pt is >50yo
 - 0 Metastasis (rare)
 - NB most ovarian tumors are not GCTs but are surface epithelial tumors 0
 - S/S

0

- unilateral, firm, slow growing mass w/ a sensation of heaviness/discomfort (rarely tender and very rarely painful if 0 so try abx to r/o epididymitis/orchitis and if no improvement then a very atypical cancer presentation)
- often manifests after trauma 0
- men engage in poor self exams such that 40% at presentation have metastasis w/ variable Sx 0

- pt can also have primary GCTs in the mediastinum, pineal gland, and retroperitonum 0
- presence of a tumor can interfere with normal sperm production resulting in low sperm count and thus infertility 0
- 0 high beta-hCG can cause feminization

Dx

- 1st: US (macrocalcifications, hypoechoic, give abx prior for possible epididymitis/orchitis and if no improvement in 0 1wk then consider neoplasm)
- 2nd: if + mass don't do Bx b/c of r/o cancer seeding rather go straight to inguinal orchiectomy 0
- 3^{rd} : if + 1° cancer **CT-C/A/P** for staging then follow markers (LDH $t_{1/2}$ =?d, beta-hCG $t_{1/2}$ =1.25d, AFP $t_{1/2}$ =6d) to 0 determine which, if any are high, not so much for diagnosis but to follow after Tx 0
 - 4th: if + mets then check brain MRI and bone scan
- Τx
- Undergo sperm banking b/f any Tx b/c Tx, including XRT, surgery, and chemo, may compromise fertility 0 Inguinal orchiectomy (initially spermatic cord is ligated and then the sac with tumor is removed thru inguinal canal 0 not thru a transcrotal approach b/c of theoretical r/o seeding into different drainage system) followed by Tx below depending on pathology/stage
- 0 very high cure rate compared to other cancers even when metastatic
- sometimes both seminomous and non-seminomous features are present and when so they are Tx as non-0 seminomas b/c they are usually more aggressive than seminomas hence to Dx a seminoma it must have pure seminoma histology and a normal AFP
- a strict surveillance schedule indicating when to check imaging, markers, etc is critical given the fact that testicular 0 cancer is highly litigious b/c it is such a curable cancer
- treatable even if brain mets at initial diagnosis 0
- cure is possible in most pts therefore you must consider the SEs of treatment including retrograde ejaculation after 0 RPLND, oligospermia from surgery, SEs from specific chemos used
- after chemo these young pts are at risk for infertility, secondary germ cell tumors, secondary AML and secondary GI 0 cancer

Staging	Seminoma	Non-Seminona	
Stage I confined to testis Stage II	It is found that there is 20% relapse (median 12mo) during surveillance if they do not undergo any type of adjuvant treatment hence either (1) retroperitoneal XRT (classic Tx) or now (2) platinum based chemo (a study showed non-inferiority when compared to XRT), when adjuvant therapy is done the relapse rate drops to 5% nevertheless surveillance is very important Chemo w/ EP (etoposide+cisplatin)	meticulous surveillance or retroperitoneal LN dissection (RPLND), unlike seminomas non-seminomas are not radiosensitive Chemo w/ BEP (bleomycin+etoposide+cisplatin)	
restricted to retroperitoneum and periaortic LN	Manual		
 other LN (mediastinal/SC) or distant mets (lung) even if a solitary lung met is found it can be surgically removed and prognosis is still good 	 Chemo? Favorable Prognostic Group (no non-pulmonary mets) Tx: prophylactic BEP (B = bleomycin), 90%, 5yr survival is 86% Intermediate Prognostic Group (yes non-pulmonary mets) 10%, 5yr survival is 72% Poor Prognostic Group (none) 	 Chemo? Favorable Prognostic Group (testis/retroperitoneum primary, no non-pulmonary mets, AFP <1k ng/mL hCG <5k ng/mL, LDH <1.5xULN), 56%, 5yr survival 92% Intermediate Prognostic Group (testis/retroperitoneum primary, no non-pulmonary mets, AFP 1k-10k ng/mL hCG 5k-50k ng/mL, LDH 1.5-10xULN), 28%, 5yr survival 80% Poor Prognostic Group (other primary, yes non-pulmonary mets, AFP >10kng/mL hCG >50kng/mL, LDH >10xULN), 16%, 5yr survival 48% 	
Recurrence	 Chemo (Cisplatin + Ifosfamide + Etoposide/Paclitaxel/Vinblastin) 25% will be cured and those that don't undergo aggressive chemo followed by HSCT 		

	Benign Prostatic Hypertrophy (BPH)	Prostate Carcinoma
Epidemiology	Benign Prostatic Hypertrophy (BPH) • Incidence 60% of men in 60s 70% of men in 70s 80% of men in 80s • Most common benign tumor in men • RFs: hormone exposure (androgens and estrogens b/c they increase expression of DHT receptors)	Prostate Carcinoma • Incidence 0 35% of men >60yo will actually have prostate cancer but only 10% of them will be Dx and only 1% of them will die FROM not with prostate cancer • 0 30% of men in 70s
		 60% of men in 80s Most common cancer in men and second most common cancer death in men

			RFs: hormone exposure, age, AA,
			high fat diet, +FHx, exposure to - icides, alcohol, NB BPH is NOT a BF
Symptoms	Centrally located hyperplasia resulting in Lower U	rinary Tract	Peripherally located cancer resulting
.,	Symptoms (LUTS)		in typically a silent cancer early on
	 Irritative Sx 		but can present with LUTS later on if
	 Daytime frequency 		the cancer grows enough in size
	 Urgency 		 Growth into a clinically important
	 Dysuria 		cancer takes 15yrs
	Polyura		early metastasis to pelvic
	• Obstructive Sx		obturator/hypogastric LNs (not to
	 Need to push/strain to urina Difficulty starting 	ate	rectum b/c of dense fascia
	Difficulty starting Detention		w/ bomaturia (ato motostasis) and bladder
	Stop go, stop go, stop go		vertebral spine, nelvis, long bones
	 Nocturia 		ribs resulting in bone pain and at
	 Difficulty to postpone urina 	tion	those spots due to osteoblastic
	 Need to repeat urination in 	<2hrs	activity, the infiltration of mets to
	 Straining and pushing to sta 	rt	the BM coupled with increased
	 Weak stream 		trabecule also can compromise
	 Intermittent stream 		hematopoeisis resulting in
	DDx: Weak bladder muscle (detrusor), Bladder Sto	ones, Urethral	cytopenia, new onset ED
	Stones, Bladder Neck Scierosis/Contracture, Ureth	nral Stricture,	Can also metastasize to lung, liver,
Deside	Prostate Cancer		adrenal, brain
Prostate	serine protease produced exclusively by prostate and is released e	ither bound or free	Into serum and seminal fluid where it acts to increase
Δσ (ΡςΔ)	needle Bx cystoscopy age recent ejaculation) therefore not good	for diagnosis but for	r monitoring therapy
	Total: N:<4 Gre	v Zone:4-10 Cance	r:>10
	if in Grey Zone then measure ratio Free/Total and if <25% then car	ncer where higher fr	ee (" free of cancer ") = BPH while higher bound =
	cancer, follow serial PSAs over time and if >0.75ng/mL/yr or >2ng/	yr then high r/o can	cer, check PSA ranked for age, only 60% of pts w/
	prostate cancer have increased PSA		
Digital Rectal	Position: Decubitus (for non-ambulatory pts), Knee-Elbow (for	Prostate with irre	gular contour, firmness, or nodules (when palpable 70%
Exam (DRE)	Over table (best)	nave spread beyo	nd the prostate)
	Objective: it underestimates size therefore only used for finding		
	nodules, symmetry, etc.		
	Effectiveness: when alone not very sensitive or specific		
	Enlarged prostate		
Other Tests	(1) Urinary Flow Rate (Q _{max}) Recording – reduction in intensity	When + PSA and/	or + DRE then perform a TRUS guided biopsy (50% of
	of flow by prostate compression of urethra N:>15	time biopsies yiel	d cancer)
	(2) Post Voidal Residual Urine – amount of urine which remains	• •	orform random bionsios from six areas of the prostate
	in bladder after complete voiding due to compression of	ler Mante	rohlem: even w/ sextant highsy you can miss a
	urethra N:<30	s	ignificant cancer, pick-up a tiny insignificant cancer or
	Obstruction:>30	p	ick-up a cancer so significant that cure is not possible
	(3) Pressure Flow Urodynamic Studies – a device measures the	Bone Scan to det	ect the presence of metastatic disease When PSA>10 or
	difference b/t intra-abdominal pressure (P _{abd}) and intra-	high Gleason	
	detruccor (Diadder) pressure (Pves) with pressure generated by	MRI is better than	CT for detecting extracapsular spread and LNs
	$\frac{det(dssof(Pdet - Pabd - Pves))}{Dr}$		
	High Low Normal		
	Low Low Weak Detrussor		
	Low High Obstruction		
	(4) Cystoscopy – inspect urethra, prostate, bladder; it is of		
	limited value but good at ruling out: (a) urethral strictures		
	(b) bladder neck sclerosis (c) cancer (d) bladder		
	trabeculation aka muscle hypertrophy resulting in		
Staging/Treatment	Mild Sx = Modical	Glosson Grading	cale (2 (low grade therefore good) 10 (high grade
Staging/ Treatment	Initia JX - IVIEUILAI	therefore had))	סכמוב וב נוסא צומטב נוופופוטוב צטטט) – TO (נוצנו צומטפ
	prostate cansule. SFs: orthostatic hypoTN)	ancierore baujj	
	• Doxazosin (Cardura)	Stage A (10%) v	isible on microscopy not on US (1 = <5% vs 2 = >5% of
	 Levazosin (Hyrtin) 	specimen) (85%	5yr survival) = watchful waiting if 1 or surgery if 2
	 Prazosin (Minipres) most SEs, 		
	cheapest	Stage B (10%) n	odules visible on US (1 = one nodule / lobe vs 2 =

	 Tamsulosin (Flomax) least SEs, most several 	al nodules / both lobes) (75% 5yr survival) = surgery				
	expensive	 Laparoscopic Nerve Sparing Radical (includes vas 				
	 Alfuzosin (Uroxatral) 	deferens and seminal vesicles) Prostatectomy using				
	 2nd Line: 5 Alpha-Reductase Inhibitors (add to 1st 	DaVinci Robot (longer surgery but less complications)				
	line if continued Sx, decreases gland size, SEs:	SEs: impotence, urinary incontinence, etc				
	sexual dysfunction, increased hair growth, etc)					
	• Finasteride (Proscar) Stage	C (40%) beyond capsule but no mets/LNs/adjacent tissue (65%				
	 Dutasteride (Avodart) 5yr su 	rvival) = " " + XRT				
	 Suggest: herbals like Pygeum afficanum (?), 	 Radiation (External Beam or Brachytherapy w/ 				
	Serenoa repens (Sawpalmetto Extract), Beta-	Implantable Seeds) SEs: impotence (less than surgery),				
	Sitosterol (?), Cernitin (?)	proctitis, urinary incontinence				
	Severe Sx = Surgery					
	Trans Urethral Incision of Prostate (TUIP) Stage	D (40%) beyond capsule (1 = LNs vs 2 = mets) mets/LNs/adjacent				
	Trans Urethral Resection of Prostate (TURP) tissue	(30% 5yr survival) = " " + chemo + hormone				
	Trans Urethral Needle Ablation (TUNA)	Hormone Therapy (Androgen Blockade) SEs:				
	 Open Prostatectomy if prostate >60mL or other 	menopausal like Sx, Orchiectomy (remove testis to				
	weird concerning pathology	remove endogenous androgens), Long Acting GnRH				
	 Laser/Microwave Ablation if pt cannot undergo 	Agonist: Leuprolide (Lupron) to inhibit pituitary + Anti-				
	surgery b/c being AC. too ill. etc	Androgen Receptor: Flutamide (Eulexin) to prevent the				
		initial increase in testosterone that occurs with Lupron +				
		Adrenal Inhibitor: aminoglutethimide (?) to inhibit the				
		small amount of androgen produced by adrenal, NB 5 α -				
		reductase inhibitors turns out to be not that effective,				
		Suggest: herbals like vitE, selenium, low fat, high soy,				
		Intermittent androgen suppression better b/c decreases				
		selection of androgen independent clones therefore				
		decrease PSA to nadir then stop and then restart when				
		PSA >10)				
		 If hormone refractory then chemo w/ docetaxel 				

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Manual