Organs of urinary elimination

Kidneys	removes wastes from the blood in form of urine
Ureters	Transports urine from the kidneys to the bladder
Bladder	reservoir for urine until the urge to urinate develops
Urethra	Urine travells.

Differences: Female urethra is shorter than male's so more prone to UTIs

Factors effecting urination

Disease conditions	neurogenic bladder, renal failure, etc
Medications and medicla procedures	diuretics, fluids via IV, antidiuretics, anticholinergics,
Socioeconomic factors	Nervous bladder, SRO Hotels, no water, etc
Psychological factors	.
Fluid balance	Nocturia, polyuria, oliguria, anuria, diuresis, fever

Changes with aging

Prostate enlargement: starst at 40's to 80's. Urinary frequency and possible retention.

Child bearing/hormonal changes/menopause: causes urinary difficulty such as decreased muscle tone, urinary urgency and stress incontinence.

Elderly tend to drink less.

Urinary incontinence is not a normal part of aging

Decreased estrogen during & after menopause. increased risk of UTIs because urethral mucosa becomes thinner.

Common Urinary Problems

Urinary retension	bladder is unable to partially or completely empty.	socioeconomic, neurogenic bladder
Urinary tract infections (UTIs)	nosocomial, bacteriuria, urosepsis	hygiene, holding in, dehydration
Urinary incont-inence	loss of control over voiding	

lots of patients have colonozed bladders, but not considered a UTI.

Containment Devices

absorbent day pads	Briefs	Condom Catheters
Foley catheters		SPC Subra Pubic Catherizations

Skin care is important

Catheterizations

Sterilization is extremely important to not introduce pathogens into the urethra.

Type A: straight. single us only

Type B: Indwelling Foley. Has a little balloon filled with sterile water or saline. Has a split section for a syringe and urinary elimination.

Potential sites for infection

insertion point
where the tub attaches to the catheter
where the tube attaches to bag
when too close to the ground
bag too full
drainage point

SPC caths

CARE - SPC	CARE Urinary cath
inspect stoma daily	handwashing
cleanse stoma	perineal care daily and prn
roll cath between fingers daily	urine drains freely into bag
cath bad below bladder,/ not touching floor	bag not above bladder/ not close to ground
cath secure, prevent pulling on skin.	avoid tube kink
drain when 1/2 - 2/3 full.	maintain aspepsis when emptying bag
change spic, bag, tubing per facility/physician orders	wipe port with alcohol wipes prior to reconnecting when converting to alternate system.
document & care plan.	

- no longer take samples from cath bag. most residential patients will be colonized.
- mid-stream is how to take a sample.
policy states that cath has to be removed and sample taken from new cath. do we need a CNS for this patient?

Normal characteristics of urin

Volume: >30mls per hour (intke/output) | 1200-1500mLs per 24hrs. Void 4/5x/day

Sterile	colour: pale straw to amber, depends on concentration	clarity: transparent
pH 4.5-8.0	Specific gravity 1.010-2.025	No glucose, ketones or blood

odour: mild ammonia in nature

Colors caused by medications

Dark yellow: vit b12	Orange: sulphas; pyridium; warfarin
pink/red: ex-lax; dilantin	green/blue: amitriptyline; methylene blue

brown/black: iron;levodopa; nitrofurantoin; metronidazole

Specimen collection

urinalysis (u/a): ph, presence of protein, glucose, ketones, blood, specific gravity SG	Clean voided or midstream, sterile colelction cup
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Urine culture: may need 72hrs to determine bacterial growth.	clean coided or midstream, sterile collection cup.
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time collections- 12/24hrs: no urine or toilet tissue contamination	clean receptacle, stored until collection finished.

Asssiting urination

promote bladder emptying and relaxation

bladder re-training, bladder diary, voiding regular intervals, 5-7x/day

strengthening pelciv floor muscles (kegels)

precent infection, avoid indwelling caths.

encourage activity/mobolity -> reduces pressur ulcers and possible need for indwelling cath.

drug therapy

Kegels

squeeze pelvic muscles slowly increasing intensity over 8 seconds

hold for 8 sec

relax slowly over 8 sec

s

bladder scanner: see what kind of catheter is right for the patient. helps determine for full bladder and post-void residuals. PVR (post void residual).

Catheter assessment

asses meatus for swelling, redness, or discharge

patient, bed soaker pad, fram attached

no kinks

approx vol in drainage bag. bag not touching floor.

to drain bag place cylinder on floor and drain into without touching the cylinder.

assess urin color, smell, and texture when draining, close bag properly.

note volume. dispose urine according to policy.

condom cath

condom

externally, less invasive,

not too tight, not too loose

check id band, allergies? latex.

get supplies ready

wash up client. pericare.

cleanest to dirtiest.