

# Morning Report

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St. Agnes Hospital, Baltimore MD



# Chief complaint

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**Found confused in bathtub**

# History of present illness

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- ❖ 74 yo woman with PMHx of COPD, on home oxygen 2L presented with altered mental status and urinary incontinence
- ❖ “hurt all over”
- ❖ Did not recollect the event nor any premonitory symptoms
- ❖ No fecal incontinence or tongue bite
- ❖ Poor appetite, undefined weight loss

# Past Medical History

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- ❖ COPD on 2L oxygen
- ❖ Rheumatoid Arthritis
- ❖ Fibromyalgia
- ❖ Chronic pain syndrome?
- ❖ Hypothyroidism
- ❖ Choledocholithiasis
- ❖ Total hysterectomy
- ❖ Lumpectomy

# Medications

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- ❖ Hydroxychloroquine 200mg PO Q day
- ❖ Hydrocodone-acetaminophen 7.5-325mg PO Q4H  
PRN **Often ran out of it early, going to ER/clinics**
- ❖ Tiotropium handihaler 1 capsule Q day
- ❖ Levothyroxine 25mcg PO Q day

Allergy: Aspirin- rash

# Additional History

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- ❖ Widow, lived alone
- ❖ 2 sons, who checked in on her frequently; very involved in her care
- ❖ Former smoker, quit < 1 year ago
- ❖ Occasional EtOH consumption
- ❖ No illicit drug use
- ❖ Family history: non contributory
- ❖ ROS: NC

# Physical exam

Temperature	Pulse rate	RR	BP	Pulse Ox
97.6 F	110bpm	20/min	158/82 mmHg	97% (2L O2 NC)

**General:** alert, anxious, restless, BMI- 20.2 Kg/m<sup>2</sup>

**HEENT:** edema and ecchymosis in the occipital and rt. temporal region, hair crusted with dry blood, PERRL, dry oral mucosa

**Respiratory:** tachypneic, b/l decreased air entry

**Cardiovascular:** tachycardia, no murmur/peripheral edema/ JVD

**Gastrointestinal:** distended, soft, non-tender, NABS

**Musculoskeletal:** joint deformities, tenderness in occipital region

**Neurologic:** alert / oriented x 3, motor normal, non-focal exam

**Skin:** ecchymosis of b/l knee and left elbow

# Labs

8  
0.6

❖ CBC normal, mildly elevated LFTs with no elevation in bili/ alk phos

131	91	39	129
3.1	14	1.1	

❖ TSH normal

❖ URINE: yellow, hazy, pH 5, 1+  
pro., no ketones, no infection

❖ Chest x-ray: no acute lung process

# ED evaluation

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- ❖ **CT of head without contrast: no acute bleed or ischemia**
- ❖ **EKG: sinus tachycardia, no acute ST-T wave changes**
- ❖ **Cervical CT: mild degenerative disk changes; no acute fracture**

# Initial Management

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- ❖ Syncope v.s. seizure workup
- ❖ Altered mental status-> resolved
- ❖ Acute Kidney Injury
- ❖ Anorexia
- ❖ Chronic Pain syndrome, opioid dependent
- ❖ COPD oxygen dependent
- ❖ Elevated LFTs, choledocholithiasis

## Day 2

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- ❖ Acute diffuse abdominal pain
- ❖ One episode of large amount of coffee ground emesis
- ❖ NGT placed, GI evaluation
- ❖ BUN: 108 Creat: 2.3, Hgb unchanged

# Bilateral hydronephrosis



# Bilateral hydronephronephrosis

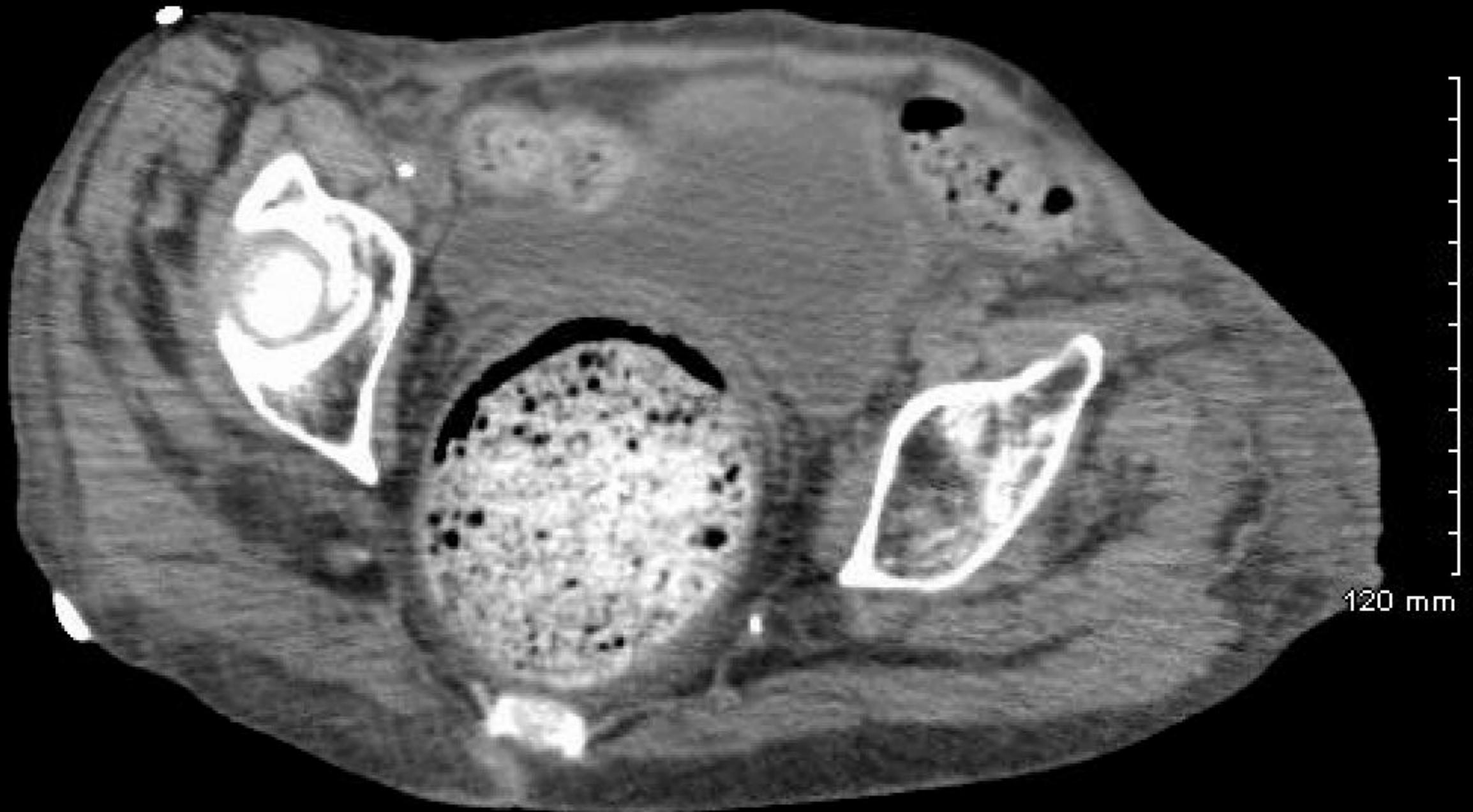


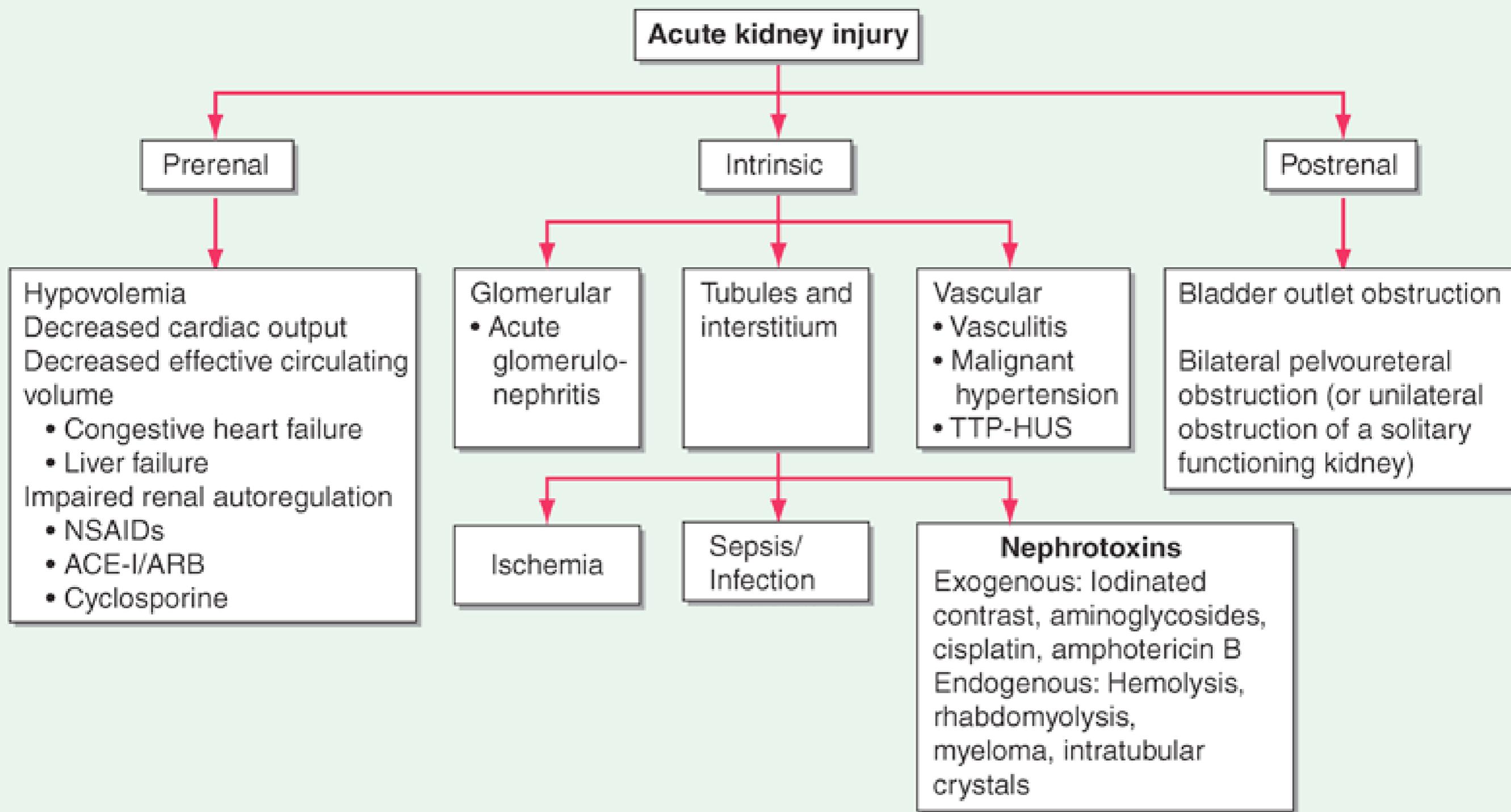


120 mm



Obstructive uropathy with bilateral  
hydronephrosis secondary to severe





Source: Longo DL, Fauci AS, Kasper DL, Hauser SL, Jameson JL, Loscalzo J: *Harrison's Principles of Internal Medicine, 18th Edition*: [www.accessmedicine.com](http://www.accessmedicine.com)

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# Causes of AKI: Post-renal

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- ❖ Prostatic hypertrophy - *most common cause*
- ❖ Renal calculi, clots, strictures
- ❖ Neurogenic bladder
- ❖ Retroperitoneal fibrosis
- ❖ Tumor: Cervical or urinary, bladder, colorectal

# Obstructive Uropathy due to constipation

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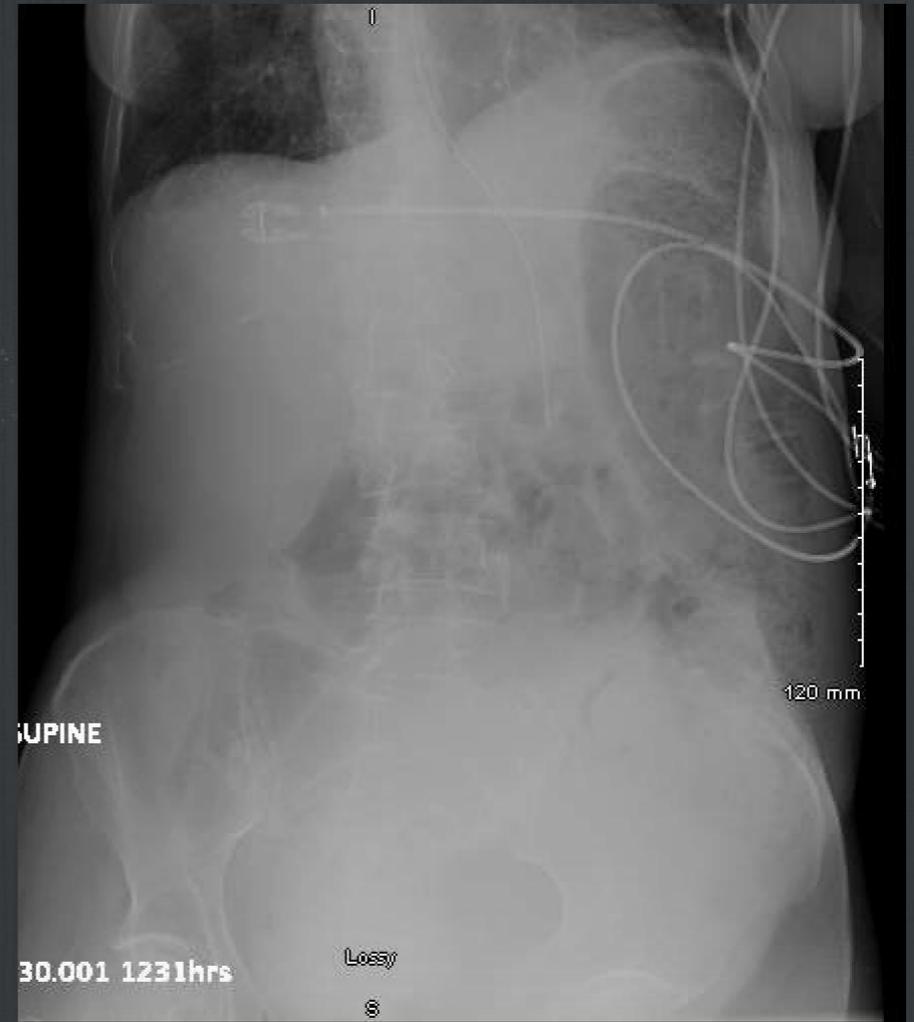
- ❖ Described in less than 50 cases
- ❖ 20 cases in adults
- ❖ First case in 1954

**Table. Cases of Obstrutive Uropathy due to Constipation**

Reference	Age	Sex	Associated disease	Event leading to diagnosis	Obstruction	Hydro-nephrosis	Treatment			Outcome
							MD	L	E	
19	M		post traumatic paraplegia	UTI, ARF	ureter	B	?	?	?	well
21	F		myelomeningocele	routine IVP	ureter	R	U	-	-	well
23	M		mental retardation	abdominal pain, ARF	bladder neck	B	U	-	U	colostomy
50	M		neurogenic bladder	routine IVP	ureter	L	U	U	U	well
55	M		schizophrenia	autopsy (COD: cahexia)	urethra	B	-	-	-	dead
59	M		?	UTI	ureter	B	-	-	U	well
60	F		depression, post traumatic pelvic injury	anuresis	bladder neck	R	U	-	U	well
65	F		none	anuresis	?	-	U	-	-	well
67	M		none	iliac vein occlusion	ureter	L	-	I	-	ileostomy
70	M		CVD	diarrhoea	?	L	U	-	-	well
71	F		DM, CVD	UTI, ARF	ureter	B	U	-	-	well
71	M		DM	abdominal pain	?	R	U	-	-	well
73	F		CVD	anuresis	?	?	-	-	U	RL
74	F		DM, CVD	UTI, ARF	ureter	R	U	-	U	well
75	F		dementia	UTI	ureter	R	-	-	U	well
81	F		dementia	UTI	?	B	U	I	I	RL
81	F		psychosis	autopsy (COD: IE)	urethra	B	-	-	-	dead
82	F		?	anuresis	?	-	?	?	?	well
84	M		opioid analgesics	lower limb ischemia	?	B	U	-	-	RL
85	F		hypothyroidism	ARF, leg edema	?	B	U	-	U	well
88	F		dementia	UTI, ARF, shock	?	R	-	-	-	dead
90	F		DM, dementia, neurogenic bladder	UTI	ureter	R	U	U	U	well

# Chronic Constipation

- ❖ 8 million annual visits
- ❖ Prevalence of 12-30%
- ❖ Women and elderly
- ❖ Combination of infrequent stools and defecatory difficulties



# Causes of chronic constipation

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## Neurogenic disorders

### Peripheral

Diabetes mellitus

Autonomic neuropathy

Hirschsprung disease

Chagas disease

Intestinal pseudoobstruction

### Central

Multiple sclerosis

Spinal cord injury

Parkinson disease

**Irritable bowel syndrome**

**Drugs**

## Non-neurogenic disorders

Hypothyroidism

Hypokalemia

Anorexia nervosa

Pregnancy

Panhypopituitarism

Systemic sclerosis

Myotonic dystrophy

**Idiopathic constipation**

Normal colonic transit

Slow transit constipation

Dyssynergic defecation

# Drugs causing constipation

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## **Analgesics**

## **Anticholinergics**

Antihistamines

Antispasmodics

Antidepressants

Antipsychotics

## **Cation-containing agents**

Iron supplements

Aluminum (antacids, sucralfate)

Barium

## **Neurally active agents**

Opiates

Antihypertensives

Ganglionic blockers

Vinca alkaloids

Calcium channel blockers

5HT<sub>3</sub> antagonists

# Chronic Constipation

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- ❖ Alarm symptoms:

- ❖ sudden changes in bowel habits

- ❖ blood in stool

- ❖ unexpected weight loss

- ❖ strong family hx of colon cancer

- ❖ Most GI societies recommend a CBC as screen for anemia

- ❖ Selected patients: TSH, Calcium, glucose

# Fecal Impaction

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- ❖ Inability to sense and respond to the presence of stool in the rectum.
- ❖ Common causes: Decreased mobility and lowered sensory perception
- ❖ Diagnosis — Digital rectal examination (not necessarily hard)
- ❖ Can occur in the proximal rectum or sigmoid colon

# Fecal Impaction Management

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- ❖ **Manual disimpaction**
- ❖ **Warm-water enema with mineral oil**
- ❖ **If the above measures fail:**
  - ❖ **local anesthesia to relax anal canal and pelvic floor muscles**
  - ❖ **abdominal massage**
  - ❖ **colonoscope with a snare to fragment fecal material**
  - ❖ **Impending perforation or ischemia -> surgery may be necessary**

# Take home points

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- ❖ The prevalence of constipation in the older adults is as high as 24 to 50 percent.
- ❖ Address constipation in all patients, especially patients with diabetes, psychiatric disease, on medications that cause constipation.
- ❖ Chronic constipation causing obstructive uropathy is very rare. However, it should be considered as one of the possibilities of renal function impairment.



Thank you

Review

# Constipation Advances in Diagnosis and Treatment

Arnold Wald, MD

January 12, 2016



[Hide Cover](#)

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## Constipation: Advances in Diagnosis and Treatment

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**Table 1. Available Laxatives and Strength of Recommendations to Treat Chronic Idiopathic Constipation According to GRADE Criteria<sup>a</sup>**

	Recommendation <sup>b</sup>	Quality of Evidence <sup>c</sup>
<b>Bulk agents</b>	<b>Strong</b>	<b>Low</b>
Psyllium, methylcellulose, calcium polycarbophil, wheat dextrin		
<b>Nonabsorbed substances</b>		
PEG 3350	Strong	High
Lactulose <sup>d</sup>	Strong	Low
Magnesium salts	NA	NA
<b>Stimulants</b>		
Bisacodyl	Strong	Moderate
Senna	NA	NA
<b>Secretory drugs<sup>d</sup></b>		
Lubiprostone	Strong	High
Linaclootide	Strong	High

Treatments	Cost per Month, 2015 \$
Bulk agents	
Psyllium (10 g daily), range <sup>b</sup>	14.22
Nonabsorbed substances	
Lactulose (20 g daily)	144.00
PEG 3350 (17 g daily) <sup>b</sup>	18.25
Stimulants	
Senna (2 tabs daily)	0.34
Bisacodyl (2 tabs daily)	0.75
Secretory drugs	
Lubiprostone (24 µg twice daily)	293.02
Linaclotide (145 µg daily)	283.70

Abbreviation: PEG 3350, polyethylene glycol 3350–electrolyte.

<sup>a</sup> Data from the University of Wisconsin.<sup>6</sup> Retail costs are higher.

# Opioid Induced Constipation

Table 2. FDA-Approved Drugs for Opioid-Induced Constipation

Drug	Formulations	Usual Adult Dosage	Response Rate (Active Drug vs Placebo) <sup>a</sup>	Cost <sup>b</sup>
<b>Mu-Opioid Receptor Antagonists</b>				
Naloxegol - Movantik (AstraZeneca)	12.5, 25 mg tabs	25 mg PO once daily <sup>c</sup>	35%-44% vs 29%	\$249.60
Methylnaltrexone - Relistor (Salix/Valeant)	8 mg/0.4 mL single-use syringes, 12 mg/0.6 mL single-use vials, syringes	12 mg SC once daily <sup>d</sup>	59% vs 38%	2161.80
<b>Chloride Channel Activator</b>				
Lubiprostone - Amitiza (Sucampo/Takeda)	8, 24 µg caps	24 µg PO bid <sup>e</sup>	27% vs 19%	314.50