Herbal Approaches to Kidney and Bladder Health

Richard Mandelbaum RH
Eliminatory Organs of the Body

- Liver
- Lung
- Skin
- Bowels
- Kidneys and bladder
Role of the Urinary System

• Detoxifying / antidyscratic function:
  – Nephrons in kidneys filter out waste from blood, to be voided by the bladder, and return essential molecules to blood
  – toxins
  – certain medications
  – hormones
  – other metabolic waste

• Regulation of:
  – Electrolyte / mineral salt balance
  – Water balance
  – blood volume
  – blood pressure
  – Blood glucose levels
  – maintenance of pH of blood

• Hormonal role in the formation of RBCs in bone marrow
Common Complaints

- Urinary Tract Infection
- Interstitial Cystitis (IC)
- Urinary and renal calculi
- Urinary incontinence
- Urinary frequency (overactive bladder)
- Irritable Bladder Syndrome

- Nephropathy: Kidney disease
Differentiating Bladder Dysfunction

• Urgency / urinary frequency / difficulty voiding bladder
  – Infection
  – Overactive bladder
  – IC
  – Benign prostatic hyperplasia or prostate cancer

• Pain / discomfort
  – Infection
  – IC

• Hematuria (blood in urine)
  – Infection
  – Bladder cancer
  – Calculi
Agrimony (Agrimonia spp.)
General Considerations for a Healthy Renal / Urinary System

• Hydration: the kidneys need water! Drink sufficient water, especially in a.m.
• Avoid excessive protein especially with kidney disease or damage
• Mineral and nutrient balance: avoid excessive sodium and calcium, balance with sufficient magnesium and potassium
General Considerations for a Healthy Renal / Urinary System

• Intimate link to Nervous System: the kidneys and bladder function on a calibrated balance between sympathetic and parasympathetic function

• The Bladder and GI tract are interwoven neurologically; imbalances and bladder dysfunction are often associated with GI dysfunction (such as IBS)
Urine itself has a history of use as medicine

• Antiseptic, anti-fungal properties
• Used topically to disinfect wounds, to combat fungal infection
• Used internally in many traditions around the world (generally one’s own urine consumed)
And as a tooth whitening mouthwash!

Celtiberia in terra, quod quisque minxit, hoc sibi solet mane dentem atque russam defricare gingiuaam, ut quo iste uester expolitior dens est, hoc te amplius bibisse praedicet loti.

In the country of Celtiberia [Spain] what each man pisses, he’s used to brushing his teeth and red gums with, every morning, so the fact that your teeth are so polished just shows you’re the more full of piss.

-Gaius Valerius Catullus (c. 84 – 54 BC)
There is a strong and intimate Bladder-Mind Link
Frequently concurrent conditions with bladder dysfunction

- Mental illness
- Trauma, history of abuse
- IBS / IBD
- Fibromyalgia
- Lupus
- Sjogren’s syndrome
- Allergies
In Chinese tradition, the Bladder receives its Qi directly from the Kidneys.

Emotional health is characterized by a feeling of safety; confidence and will; and imbalance by fear and self-doubt.
Nocturnal Enuresis and Nocturia

• Nocturnal enuresis in children often neurosis / anxiety
  – Hypericum (Saint Johns wort)
  – Eschscholzia (California poppy)
  – Other nervines
  – Sumac fruit and other gentle urinary astringents

• Possible dysregulation of bladder and kidney circadian rhythm

Kava (Piper methysticum)
Bladder Health
For toning and soothing the bladder wall

Corn silk (Zea mays)

Marshmallow (Althaea officinalis)
Chimaphila (pipsissewa) - L
Arctostaphylos (uva-ursi) - R
Thuja (arborvitae) - L
Mitchella (partridge berry) - R
Diuretics (to flush the urinary tract and reduce fluid retention)

- dandelion leaf
- horsetail
- agrimony
- corn silk
- goldenrod
- parsley seed
- celery seed
- pellitory
- bean pod

- juniper berry
- couch grass
- nettle
- gravel root
- cleavers
- green tea
- Foods: parsley, celery, lovage, inulin-containing foods
Solidago (goldenrod)
Equisetum arvense (horsetail)
Petroselinum (parsley)
Taraxacum (dandelion leaf)
Glycyrrhiza (licorice)

Licorice “eases the cutting heat of burning urine”

-Johann Sauer
Overactive Bladder

- Increased urinary frequency and sensations of urgency; sometimes incontinence
- Characterized by a spasmodic and atonic, potentially prolapsed bladder
- Can be exacerbated or caused by Parkinson’s or other neurological disorders, UTIs, calculi, prostate dysfunction, diabetes, constipation, ADRs from certain medications
- Worsened by caffeine, alcohol, inadequate dietary fiber
Overactive Bladder

- Increase dietary fiber
- Reduce alcohol, caffeine, tobacco
- Identify dietary triggers
- Address emotional health
- Address UTIs, prostate, or other factors
- Physical activity / weight loss

- Look for patterns of Kidney deficiency and/or Spleen Qi deficiency

- Tonify and strengthen the bladder; bladder training
- Simultaneously relax the bladder and reduce constriction and spasming
  - Pelvic Floor Exercises (Kegel)
  - Bladder tonics: agrimony, corn silk, pipsissewa
  - Relaxants / antispasmodics: wild yam, crampbark, valerian
  - Strengthen Kidney Yang and Spleen
Urinary Incontinence

• Possible etiology: bladder prolapse, weak pelvic floor, spastic bladder or pelvic floor, renal overproduction of urine, BPH
• Pelvic floor exercise or therapy
• Astringe and tone: agrimony, lady’s mantle, sumac fruit, rosehips, saw palmetto, Schisandra
• Nervines if indicated: hops
• Pumpkin seed oil
Urethral Syndrome or Painful Bladder Syndrome (Interstitial Cystitis)

- Bladder and/or pelvic pain, from mild to severe
- Increased urinary frequency and sometimes incontinence
- More common in women than men
- Generally not associated with infections

- Can be associated with:
  - History of sexual abuse
  - Weak / compromised and hyperpermeable bladder wall (leaky epithelium)
  - Possibly autoimmune activity

- Triggers can include:
  - Sexual activity
  - Stress
  - Menstruation
IC /Painful Bladder Syndrome

Dietary modifications:
• Reduce raw foods and acidic foods
• Eliminate wheat, possibly all gluten
• Identify other possible food allergies or triggers
• Eat foods high in arginine: seafoods, sesame seeds, peanuts, spinach, turkey
• Eat foods high in quercitin: blueberries and other berries and fruits

Herbs:
• Soothe the bladder wall and reduce inflammation: turmeric, aloe, marshmallow
• Strengthen the bladder wall: agrimony, uva ursi, corn silk, meadowsweet
• Address pain
• Re-regulate the immune response
• (Cranberry sometimes exacerbates)

Supplements:
• Quercitin – 1000 mg/day
• L-arginine: 1500 mg/day

Address emotional health;
Strengthen Qi and Calm the Shen

Re-regulate melatonin production
Urinary Tract Infections

- Can be exacerbated by diaphragm, oral birth control
- Stress
- Reduced immune health / resistance
- Alcohol
- Black tea, coffee
- Repeated antibiotics and/or Candida overgrowth
- STDs
UTIs

• Diet: no sugar or sweet fruits/vegetables; limited carbs with lowest possible glycemic index
• Plenty of water
• Probiotics: supplements and food
• Attention to hygiene
• Hypoallergenic soaps, toilet paper; care with chemicals in douches, detergents, creams
Herbs for UTIs

- Cranberry juice, unsweetened, or extract
- Reduce inflammation and soothe bladder wall: corn silk, goldenrod, horsetail, marshmallow
- Herbs antiseptic to U/T: uva ursi, goldenseal, barberry, Coptis, birch, fresh yarrow (not dried), juniper berry, black walnut hull, horsetail, pipsissewa

*Note that some herbalists do not combine cranberry and uva ursi*

- For pain/discomfort (dysuria): hydrangea, kava, black haw
- Strengthen tonicity of bladder wall: agrimony, ladies' mantle, goldenrod
- Immune tonics and modulators (long term)
Cranberry (Vaccinium macrocarpon)

- Proanthocyanins inhibit bacterial adherence to mucosal lining of bladder and urethra for prevention and in early stage of infection
- Combine with antimicrobial herbs
- Use care during pregnancy or severe kidney disease; kidney infection requires medical attention.
- Dose of unsweetened juice: 16-32 oz juice daily. Prevention: 4-32 oz daily
Scutellaria baicalensis

huang qin
Case history

• 44 year old woman
• Irritated bladder, repeated UTIs
• Fatigue, sleeping long hours, trouble falling asleep
• Urine tests negative for infection; urologist considered diagnosis of IC
• Trouble voiding bladder, discomfort and irritation upon urination
• History of yeast infections, exacerbated by sex
• Stress levels reported as high, neck tension, teeth grinding
• Other: vaginal dryness, graying hair, constipated, cold constitution
• Gets sick often
Case history

Diet: 3 cups coffee, heavy on grains, fruit, fruit juices
• Craves sugar

Current supplements:
• Probiotics
• Repeated antibiotic use (Cipro) which helped only temporarily
• Took uva ursi (Nature’s Way) for one week after last UTI
Case history - protocol

Diet:
• Unsweetened cranberry juice: 2-4 oz daily; increase for acute state
• Adequate water intake
• Complete elimination of refined sugar, refined carbohydrates, and juice
• Focus on buckwheat, quinoa as grain substitutes
• Fruit eaten whole, mainly berries, esp. blueberries
• Small amt of cultured/fermented food daily
• Increase in healthy fats and oils
• Dandyblend to substitute coffee
Case history - protocol

Other:
• Probiotics
• Forest bathing
• Aromatherapy with lavender in the evening
• Sleep routine ("sleep hygiene")
• Host Defense Cordychi
Case history - protocol

Herbal tea:

- 3 tsp corn silk
- 2 tsp marshmallow
- 2 tsp shatavari
- 1 tsp licorice
- 1 tsp agrimony

Steep in one quart water overnight, strain and drink daily.
Case history – outcomes

After 8 weeks on protocol:
• “Feeling much better” – had one mild UTI-like experience but resolved
• Was “really hard” to give up sugar but feels better overall and in UT specifically
• Dandyblend allowed her to reduce coffee to one cup
• Saw subtle but significant improvement in mood
• Improved sleep – needed “permission” to sleep
• Recommended reduction to one cup tea blend per day going forward, eventually occasional basis.
Renal / Urinary Calculi

- Increasing in incidence
- Worsened by sedentary lifestyle, dehydration; also look to excess Ca intake and levels, less common: hyperparathyroidism

Types:
- Calcium oxalate stones: urine is naturally rich in Ca oxalate; common
- Calcium phosphate stones: diet, intestinal disease – usually related to infection
- Uric acid stones – low urine pH – 10% of cases
Calcium oxalate kidney stones
Renal / Urinary Calculi

Focus on diet:
• Avoid oxalates: sorrel, rhubarb, spinach, lambs quarters, chocolate, beets, cheese
• Increase Mg
• Increase water intake especially in a.m.
• No Ca supplements unless directly indicated
• Avoid black tea and coffee
• Obesity but more often lack of physical activity can also be a factor in some cases
Renal / Urinary Calculi

It is difficult to dissolve stones with herbs, but herbs can help to expel them and to prevent formation.

Treatment:

• Very hot baths and hot compresses on kidneys
• Diuresis and expulsion of stones (antilithics): gravel root, pipsissewa, goldenrod, Collinsonia, celery seed, parsley, Chanca piedra (*Phyllanthus niruri*), birch, dandelion leaf, nettle leaf (and possibly root), plantain seed, Abutilon seed
• For renal colic / pain: California poppy, chamomile, hydrangea, Corydalis

For prevention:

• once per week flush plus seasonally for two weeks: corn silk, cleavers, pipsissewa, gravel root
Chimaphila (pipsissewa) - L
Eupatorium (gravel root) - R
Nephropathy

Kidney failure – acute and chronic

• Contributing factors / causes:
  – Hypertension (can be cause or effect)
  – Other conditions: diabetes, SLE
  – Inadequate urinary excretion of alkaloids or other substances
  – Certain medications: antibiotics, lithium
  – Smoking
  – Toxins including heavy metals, industrial chemicals, pesticides
  – Amanita poisoning
  – Chronic dehydration or electrolyte imbalance
Herbs for Renal Failure

• Addressing at an early stage or even better, identification of high risk and prevention, is best

• Very few herbs have been proven scientifically to be nephro-trophorestorative.

• Some herbs may in fact be harmful in advanced stages of disease, including licorice, and possibly goldenseal, horse chestnut, as well any but the gentlest diuretics.

• Great care should be taken in addressing the condition herbally.
Cordyceps sinensis

Cordyceps has been shown to have nephroprotective and restorative properties in cases of chronic kidney failure, including lupus nephritis.

Cordyceps also appears to be helpful and safe to use in transplant patients taking cyclosporine, to reduce adverse effects and protect kidney function.
Urtica dioica

Nettle seed has been successfully used as a kidney trophorestorative in chronic nephritis and kidney degeneration. (Winston and Kuhn 2008)
Milk thistle has been shown to have nephro-protective and restorative activity, and is used in cases of chronic degenerative kidney disease as well as acute toxicity such as from *Amanita* poisoning.
Potential additional herbs

- Astragalus
- Rehmannia
- Salvia miltiorrhiza
- Rheum
- Flax
- Bitter and cooling herbs have been shown to be helpful in cases of free radical damage to kidneys in glomerulonephritis
- Bilberry and other flavonoid rich herbs for renal capillary fragility
- Use caution with diuretics, especially irritating diuretics

- Rudolf Weiss recommends:
  - Lespedeza capitata for chronic kidney disease
  - Bitters and laxatives as part of a protocol for nephrosis: senna, juniper, peppermint, calamus
  - Goldenrod especially with anuria
Case Study: renal failure

Male, African American male, 68 y.o.
Diagnosis of Diabetes Type II, progressive renal failure
Suffering from many diabetes-associated health challenges:
• Impaired circulation and neuropathy, lower back / kidney pain
• Dysuria; vision decline and ocular disease
• Hypertension controlled by medication
• Lack pf physical activity due to physical impairments; difficulty walking, poor balance, muscle cramping and tightness
• Very low energy levels despite decent quality and quantity of sleep
• Low iron, ferretin, folate levels
• Ex-smoker
• Current supplements: iron, Vitamin C
• Current medications: Gabapentin (for neuropathy and pain), Sodium bicarbonate (antacid), pentoxtylline (for pain and cramping), Labetalol (for hypertension), furosemide (diuretic), Amitiza (for constipation), Zocor/simvastatine (for blood lipid/cholesterol)
Protocol

• Infusions of Schisandra and corn silk
• Cordyceps capsules (Host Defense): one cap 3x/day
• Kidney Support Compound (Herbalist&Alchemist), gradual increase to one tsp (5 ml) 3x/day
  Contains: Stinging Nettle seed (Urtica dioica), Astragalus root (Astragalus membranaceus), processed Rehmannia root (R. glutinosa), Stinging Nettle leaf (Urtica dioica) and Cordyceps mycelium (Cordyceps sinensis)
• Milk Thistle capsules (Herb Pharm): one capsule 3x/day.
Other:

• Floradix
• Co-Q10: 100 mg/day
• Make sure to drink adequate water; hydration is crucial to renal health.
• Reduce animal foods in the diet especially red meat.
• Eat adequate fresh and cooked fruits and vegetables, including berries such as blueberries, raspberries, Brassicas including kale, broccoli, Brussels sprouts, cauliflower, etc., and Alliums including onions, garlic, chives, leeks, etc.
• Organic flax seed oil: One Tablespoon 1-3 times per day, taken straight or mixed into or dribbled on food.
• Massage and/or acupuncture to relieve muscular pressure and discomfort
Outcomes

One month after protocol began, was told by physician to prepare for dialysis.

Reporting that he no longer experiences pain the lower back / kidney area, overall more energy and feeling healthier.

Had been taking lower doses of herbs than recommended.

Changes in protocol:

• Continue Schisandra/Corn silk
• Increase Kidney Support dose to one tsp (5 ml) 3x/day.
• Increase both Cordyceps and Milk thistle caps from two to three of each per day
Outcomes

Approximately four months after protocol began:

“Breathing better and deeper. Feeling good. Urinating well.”

Reporting improved energy levels; as much as he has ever had in the past.

Lab results:

- BUN decreased to 38 mg/dL (from 112)
- Creatinine decreased to 4.25 mg/dL (from 5.86)
- GFR increased to 14 (from 10)
- HA1C decreased to 7.2% (from 14)
- Triglycerides decreased to 67 mg/dL (from 156)
- Total Cholesterol : HDL decreased to 2.7 (from 4.6)
1.5 years after initial session

- Renal health has stabilized, still fending off dialysis.
- Continuing protocol with some adjustments.
- Focusing on other issues, such as sexual health impaired by long-standing diabetes.
Thank you!

richardmandelbaum.com
arborvitaeny.com