

# IC/BPS Treatment Chart & Checklist



An estimated 12 million men and women in the USA struggle with symptoms of IC/BPS. In 2011, the American Urological Association released new treatment guidelines which we have adapted to create the patient checklist below. Patients generally begin with the least invasive therapies and, if needed, progress through the various steps to more invasive therapy. We encourage you to learn as much as you can about the pros and cons of each treatment by talking with your physician, reading various books and/or the ICN website and, for more academic patients, diving into the 68 page long AUA Guideline document which you can find at: <http://www.auanet.org>

<b>AUA Step One: First-Line Treatments</b>			
✓	Therapy	Pros	Cons
	<b>Adequate Water Intake</b>	Noninvasive. Water dilutes the urine, making it less irritating. Good for overall health	Patients may associate water drinking with increased frequency. Some may find it difficult to drink 6-8 glasses a day
	<b>Diet Modification</b>	Noninvasive	Takes time to discover which foods irritate. Some patients may be unwilling to give up their favorite foods, such as coffee or soda.
	<b>Heat or cold packs</b>	Noninvasive - Some patients prefer heat while others cold.	Risk of burns. Never sleep with a pad w/o an automatic turn off.
	<b>OTC - Calcium Glycerophosphate</b> ( <i>Prelief®</i> ) <i>Available at <a href="http://www.ic-network.com">www.ic-network.com</a></i>	Affordable supplement reduces acid of foods/meals that could irritate the bladder.	Doesn't work for everyone. Not appropriate for those who struggle with kidney stones.
	<b>OTC - Phenazopyridine</b> ( <i>AZO Urinary Pain Relief™</i> ) <i>Available at <a href="http://www.ic-network.com">www.ic-network.com</a></i>	Affordable OTC product that may help reduce pain and discomfort.	Not for long-term use. May help mild to moderate discomfort.
	<b>OTC - Neutraceuticals</b> ( <i>Brands suggested at the AUA 2013 Conference include CystoProtek®, CystaQ®, Desert Harvest Aloe</i> )	Affordable OTC products often used by those who lack health insurance, cannot afford and/or tolerate treatments. <i>Available at <a href="http://www.ic-network.com">www.ic-network.com</a></i>	May or may not be tolerated.
	<b>Meditation &amp; Guided Imagery</b> ( <i>Beaumont Hospital Guided Imagery CD's for men or women</i> ) <i>Available at <a href="http://www.ic-network.com">www.ic-network.com</a></i>	Noninvasive - Calming muscles, reducing tension and anxiety is good for overall health.	Patients may not believe that meditation may help calm their bladder symptoms. Patients may be unwilling to devote 15-30 minutes a day to this exercise.
	<b>Pelvic Floor Relaxation</b>	Noninvasive - Reduces muscle tension that can make urination and intimacy painful.	Patients may not be able to afford CD's or books which explain this. May forget to do this.
	<b>Bladder Training</b>	Noninvasive - Timed voiding may help improve bladder capacity	Not appropriate for use in patients with bladder pain
	<b>Treatment of related conditions</b> that may be exacerbating IC (constipation, IBS, endometriosis, panic, depression, vulvodynia)	Reducing pain from one condition may help reduce pain as a whole in the body	Patients may lack health insurance and/or lack access to medical care providers who can diagnose and/or treat these issues.
	<b>Stress Management</b>	Stress is well known to increase IC symptoms. Learning to control and reduce stress is an essential life skill.	Patients may be unwilling to take a class, read a book or talk with a professional to improve their stress management skills.

## Step Two - Second Line Treatments

✓	Therapy	Pros	Cons
	<b>Physical therapy</b> to resolve pelvic floor muscle trigger points, muscle tension, painful scar tissue, etc.	Found to be the MOST EFFECTIVE THERAPY at reducing the discomfort in a formal NIDDK funded clinical trial.	May not be covered by insurance. Patients may have not been assessed for pelvic floor dysfunction and/or be reluctant to have intimate manual muscle work performed (vaginal or rectal).
	<b>Pain Management</b>	The AUA encourages the aggressive treatment of pain through a comprehensive treatment plan, which may include the use of narcotic medication and other pain reducing strategies.	Requires health insurance. Some physicians are unwilling to treat pain and/or require referral to a pain treatment program. Opioid pain medications can cause moderate to severe side effects (i.e. sedation, constipation, etc.).
	<b>Oral Medication - Amitriptyline (Elavil)*</b> Grade B	This tricyclic antidepressant has a strong record of success in reducing IC symptoms. It is believed to help calm the nerves in the bladder.	Side effects are highly likely, particularly sedation, drowsiness, nausea, dry mouth. Long term use at high dosages has been associated with cognitive decline.
	<b>Oral Medication - Cimetidine (Tagamet)</b> Grade B	Inhibits acid production in the stomach.	No adverse events reported.
	<b>Oral Medication - Hydroxyzine (Atarax, Vistaril)*</b> Grade C	An antihistamine with mixed effectiveness (92% to 23%) in studies.	Side effects were common and generally not serious.
	<b>Oral Medication - Pentosan Polysulfate (Elmiron)</b> Grade B	The only FDA approved oral medication for IC with moderate effectiveness (21 to 56%) effectiveness in studies.	Adverse events common but generally not serious (i.e. GI, diarrhea, hair loss). May be quite expensive if not covered by insurance.
	<b>Instillation - Lidocaine</b> Grade B	Lidocaine can have a numbing effect thus immediately reducing bladder discomfort. Can treat a painful flare. Frequently combined with heparin or elmiron to create a "rescue instillation."	May not be covered by insurance. Requires catheterization. May cause pain, discomfort in patients who do not tolerate one or more of the ingredients used.
	<b>Instillation - Heparin</b> Grade C	Heparin acts as a bladder coating and is frequently combined with lidocaine to create a "rescue instillation."	May not be covered by insurance. Requires catheterization.
	<b>Instillation - DMSO (RIMSO-50)</b> Grade C	The only FDA approved bladder instillation with various levels of success (25 to 90%).	May not be covered by insurance. Requires catheterization. May cause pain, discomfort and a garlic like odor. No longer used in some clinics due to the effectiveness of the above treatments.

## Step Three - Third Line Treatments

✓	Therapy	Pros	Cons
	<b>Hydrodistention with cystoscopy</b> - only low pressure, short duration procedures Grade C	Considered if first and second line treatments don't work.	Requires outpatient surgical setting. May cause pain and discomfort during the post operative recovery period. Bladder rupture may occur in rare cases.

	<b>Hunner's Ulcer treatment with fulguration, electrocautery or triamcinolone</b> Grade C	Ulcer treatment can dramatically reduce pain.	Requires outpatient surgical setting. Ulcers may recur and need additional treatment.
<b>Step Four - Fourth Line Treatments</b>			
	<b>Percutaneous tibial nerve stimulation (Urgent PC)</b> Grade C  FDA approved for incontinence and symptoms of frequency / urgency but NOT for IC/BPS	The least invasive & least expensive form of neuromodulation, requiring an acupuncture needle and an external TENS unit or device. May be covered by Medicare. Can easily be terminated without additional surgery.	Minimal risk of side effects. Requires ten weekly office visits.
	<b>Sacral nerve stimulation (Interstim)**</b> Grade C  FDA approved for incontinence and symptoms of frequency / urgency but NOT for IC/BPS	Would be considered if none of the previous therapies were effective. May be covered by medicare.	Requires surgical implant of an electrical stimulator in the body. Serious adverse events can occur requiring additional surgeries. The FDA MAUDE database has hundreds of serious complication reports (i.e. MRSA infection, malfunction, device movement, difficulty walking, heart rhythm changes and fatalities). Device removal requires additional surgery. <b>REQUIRES LONG TERM CARE &amp; MONITORING.</b> May not be covered by health insurance.
<b>Step Five - Fifth Line Treatments</b>			
✓	<b>Therapy</b>	<b>Pros</b>	<b>Cons</b>
	<b>Cyclosporine A**</b> Grade C	Found solidly effective in two small trials.	Severe risk of adverse events including: immunosuppression, nephrotoxicity, high blood pressure and increased serum creatinine. Requires long term care and monitoring.
	<b>Botulinum Toxin (BTX-A)**</b> Grade C	Several studies conducted finding modest effectiveness.	Invasive. May not be covered by insurance. Can have multiple, serious side effects. Patients may have to use a catheter to empty their bladder. Requires long term care and monitoring.
<b>Step Six - Sixth Line Treatments</b>			
	<b>Surgery</b> is RARELY used as a treatment for IC and only in the most severe cases. Grade C	May be considered if the patient has found no relief from all the other therapies or has developed a severe, unresponsive fibrotic bladder.	Symptom relief is not guaranteed and pain can persist even after cystectomy. Requires several months of recovery time.

\* Low cost generics are available. Drug assistance program available from the manufacturer.

\*\*The evidence supporting the use of Neuromodulation, Cyclosporine A, and BTX for IC/BPS is limited by many factors including study quality, small sample sizes, and lack of durable follow up. None of these therapies have been approved by the US FDA for IC/BPS.

Grade A = well-conducted clinical trials and/or exceptionally strong observational studies.

Grade B = clinical trials that have weaknesses in their procedures or generally strong observational studies.

Grade C = observational studies that are inconsistent, small or have other problems which could influence the data.

