

VISION

THE INTERNATIONAL PELVIC PAIN SOCIETY

Professionals engaged in pain management for men and women.

IPPS



Tragically, Dr. Paul Perry passed away on Saturday, May 3, 2008. He died at home due to an aggressive lung cancer. His death is an unbelievably great loss to all of us in the International Pelvic Pain Society and to women who suffer with pelvic pain. Dr. Perry was a superb physician with abundant clinical skills and knowledge of diagnosis and treatment of pelvic pain. He also was an ardent spokesman for improvement of the care of women with chronic pelvic pain. He was a founding member of the International Pelvic Pain Society and served as its chairman of the board until shortly before his death. His energy and enthusiasm not only brought the International Pelvic Pain Society into existence, but also insured its survival. The International Pelvic Pain Society would not exist were it not for C. Paul Perry.

Dr. Perry was a native of Mobile, Alabama, and was educated in the University of Alabama system (and remained a devoted Alabama football fan until his death). His residency in Ob/Gyn was done at Wilford Hall USAF Medical Center, in San Antonio. Dr. Perry was the author of numerous scientific papers on pelvic pain and laparoscopy, and was a popular national and international lecturer on these topics. Dr. Perry funded the C. Paul Perry Pelvic Pain Center, a premier center in Birmingham, Alabama, specializing in the care of patients with chronic pelvic pain, and was its medical director until his death.

Our prayers and condolences go to Dr. Perry's family, his dear friends, and patients. Paul will be sorely missed by those of us who knew and loved him.

Please donate to the C. Paul Perry Memorial Education Fund

The C. Paul Perry Memorial Education fund was created in memory of C. Paul Perry (1945 - 2008). The IPPS C. Paul Perry Memorial Fund honors Dr. Perry's life and future ambitions by providing meeting travel grants to IPPS meetings, or support for other programs that will educate health care professionals how to diagnose and manage pelvic pain, thereby changing the lives of patients worldwide.

The C. Paul Perry Memorial Education Scholarship Fund is solely made possible by generous individual donations, as well as contributions from local businesses and organizations. Your donation is vital for the success of the fund.

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IPPS is recognized by the Internal Revenue Service (IRS) as a charitable organization under section 501(c)3 of the IRS code. All donations are tax deductible. Please consult with your tax advisor for specifics.

For donations, please visit the IPPS website at: www.pelvicpain.org or mail to:

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Treatment Modalities, Health Care Resource Utilization, and Costs in Patients Diagnosed with Interstitial Cystitis

Edward J. Stanford, MD; Andrew Chen, MS; George J. Wan, PhD; Orsolya E. Lunacsek, PhD, MBA; Peter K. Sand, MD

OVERVIEW

In a retrospective analysis of more than 3700 claims, interstitial cystitis was associated with substantial health care costs and use of resources.

BACKGROUND AND OBJECTIVE

Interstitial cystitis (IC), also called painful bladder syndrome, is a chronic condition characterized by urinary urgency or frequency and/or pelvic pain of unknown etiology.

No standardized treatment guidelines and few randomized controlled trials comparing treatment outcomes exist for IC. The only treatments approved by the United States Food and Drug Administration for the relief of IC symptoms are oral pentosan polysulfate sodium (PPS) and intravesical dimethyl sulfoxide (DMSO). A variety of other unapproved therapies are often used alone or in combination.

Besides involving physical and social concerns, IC poses a financial burden for individuals and society in direct medical costs and loss of work resulting from symptoms. The purpose of the present study was to examine treatment modalities, use of health care resources, and costs in patients with IC.

MATERIALS AND METHODS

We conducted a retrospective analysis of claims from January 1, 2000, through June 30, 2005, in the PharMetrics integrated medical and pharmaceutical database. Patients with 1 or more diagnoses of IC (International Classification of Diseases, 9th Edition, Clinical Modification 595.1) were identified from the claims database. The date of the patient's first claim with a diagnosis of IC served as the index diagnosis date; follow-up included the subsequent 12 months.

Patients were assigned to cohort groups based on treatment received in the first 30 days after their index IC diagnosis. Therapies of interest included pharmacologic agents such as PPS, DMSO, amitriptyline, hydroxyzine, bladder control treatments, narcotics, and nonnarcotics. The nonnarcotics category contained multiple medications, including tricyclic antidepressants and selective serotonin reuptake inhibitors, that might have contributed to IC symptom relief. Bladder irrigation and cystoscopy were also considered.

Economic outcomes and resource use were evaluated for the 12 month follow-up period. Costs and resource utilization were determined on an all-cause basis for treatment cohorts. Disease-specific costs and resource use were not evaluated. Total health care costs and resource use were categorized as related to inpatient hospitalization, physician office visits, emergency department (ED) visits, outpatient hospital visits, or prescription drugs.

RESULTS

Of the 3758 patients who met the study criteria, 2038 (54.2%) did not receive treatment in the 30 day follow-up period, and 1720 (45.8%) received a treatment of interest. Among these 1720 patients, 977 (56.8%) received monotherapy and 743 (43.2%) received multiple therapies. Multiple-therapy cohorts with sample sizes of more than 15 were separated into their own groups. The remainder were classified as "other multiple" cohort. Within the 1 year follow-up period, an additional 752 patients received treatment.

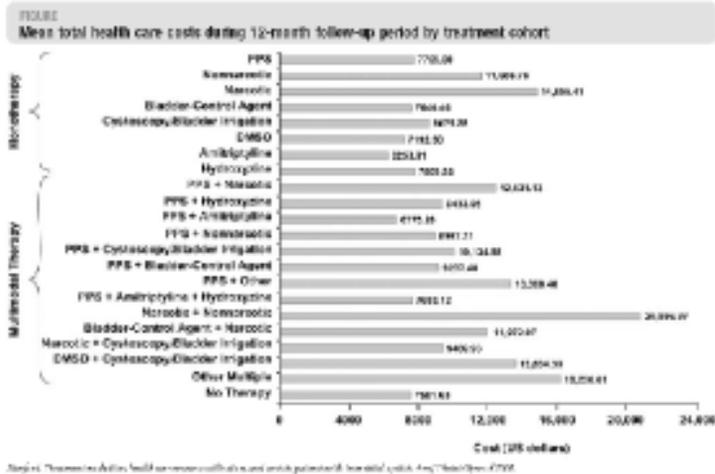
Health care resource use for the 12 month follow-up period was analyzed as the mean value per cohort. Of the monotherapy cohorts, the PPS cohort was associated with the fewest physician visits (11.59). Of the multiple treatment cohorts, triple therapy with PPS, amitriptyline, and hydroxyzine was associated with the fewest physician visits (9.67). The highest number of physician visits was associated with DMSO (17.45) in the monotherapy cohorts and SMSO plus cystoscopy/bladder irrigation (23.14) in the multiple-treatment cohorts, consistent with the multiple intravesical instillations required with this approach.

The PPS cohort had the fewest outpatient hospital visits (9.45) of the monotherapy cohorts. Of the multiple-treatment cohorts, the number of outpatient visits was lowest in the PPS plus amitriptyline cohort (7.34), followed closely by the triple-therapy PPS, amitriptyline, and hydroxyzine cohort (8.17). Again, the highest number of outpatient visits was associated with DMSO (14.63) in the monotherapy cohorts and DMSO plus cystoscopy/bladder irrigation (20.36) in the multiple-treatment cohorts.

Narcotic monotherapy (0.44) and narcotic plus nonnarcotic therapy (0.46) were associated with the most inpatient hospital stays. Several multiple-treatment cohorts containing PPS had some of the fewest inpatient stays among all cohorts. Of the monotherapy cohorts, DMSO was associated with the lowest number of inpatient stays (0.08) and PPS with the fewest ED visits (0.26).

Of the multiple-treatment cohorts, PPS plus a bladder control agent was associated with the fewest ED visits (0.26). ED visits were most frequent in DMSO plus cystoscopy/bladder irrigation (1.73) and narcotic plus nonnarcotic cohorts (1.22). Prescription fills were generally higher in multiple medication cohorts than in monotherapy cohorts. Variations in prescription counts may be related to varying lengths of therapy.

Among monotherapy cohorts, the lowest total health care costs were associated with amitriptyline (\$6258.91) and the highest from narcotics (\$14,856.41). The PPS plus amitriptyline group (\$6775.28) had the lowest total costs of the multiple-treatment cohorts; narcotics plus nonnarcotics (\$20,896.97), the highest (Figure).



Among the monotherapy cohorts, PPS (\$904.63) was associated with the lowest physician costs. Consistent with the low number of physician visits, triple therapy with PPS, amitriptyline, and hydroxyzine was associated with the lowest physician visit costs (\$597.38) among the multiple-treatment cohorts. Highest physician visit costs were associated with nonnarcotic monotherapy (\$1441.13) and narcotic plus nonnarcotic multimodal therapy (\$2073.12).

In general, multiple-medication cohorts had higher prescription drug costs than most of the single-medication cohorts. The lowest costs were associated with intravesical bladder agents. Among the oral agents, monotherapy with amitriptyline was associated with the lowest cost (\$1242.89), possibly because it is available in a generic formulation. Combination therapy with narcotic plus nonnarcotic had the highest costs (\$5742.84) among all treatment cohorts.

Multiple treatments containing PPS were associated with some of the lowest inpatient costs among all cohorts. By far the highest inpatient costs were associated with narcotic monotherapy (\$5475.83) and combination narcotic plus nonnarcotic therapy (\$6741.60). Hydroxyzine monotherapy was associated with the lowest outpatient visit costs (\$2837.44), whereas dual therapy with PPS plus amitriptyline (\$3055.03) was associated with the lowest costs among multiple-treatment cohorts.

Among monotherapy cohorts, the narcotic cohort (\$5429.38) was associated with the highest costs. DMSO plus cystoscopy/bladder irrigation (\$6799.35) was highest among multiple-treatment cohorts.

For all cohorts, the highest ED visit costs were associated with DMSO plus cystoscopy/bladder irrigation (\$1452.72). PPS had the lowest ED costs of monotherapy cohorts. The PPS plus amitriptyline group had the lowest ED costs of the multiple-treatment cohorts.

COMMENT

This study analyzed direct health care costs. Patients diagnosed with and treated for IC generated considerable health care costs through their use of resources. More than half of patients with IC did not receive a treatment of interest within the first 30 days after their index diagnosis. It is beyond the scope of this study to determine why so many patients appear to have received no treatment. Patients with IC can derive benefit from therapy; it therefore behooves physicians to treat this condition once it has been diagnosed.

Some of the treatments evaluated may not have been exclusive or indicated for IC because many off-label treatments are offered for symptom relief. In fact, some treatments may have been used for a co-morbid condition.

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Chronic narcotic use for IC should be monitored. Potential problems include significant side effects, development of tolerance, and individual variability in response. Long-term data on chronic narcotic use are not available.

The narcotic plus nonnarcotic treatment cohort had the highest mean costs in 4 of the 6 health care cost components: physician visits, inpatient stays, prescription drug costs, and total health care costs. Greater use of health care resources and higher costs associated with narcotic-treated cohorts may be related to more severe IC symptoms, which require more resources. Patients in these groups may have been refractory to traditional IC therapies.

Other than the narcotic plus nonnarcotic treatment cohort, the group with the highest health care resource use and costs was the DMSO plus cystoscopy/bladder irrigation treatment cohort. This increase may reflect the multiple intravesical instillations required with this approach. As with the narcotic cohorts, these patients could have required additional resources because of greater severity than patients who received oral monotherapy. Some of the lowest rates of health care resource use and costs were found among patients who received oral treatments, including PPS, amitriptyline, and hydroxyzine, either alone or in some combination.

Limitations of this study include its heavy reliance on claims data.

Results of this study suggest that patients with IC who are managed with oral treatments, including PPS, amitriptyline, and hydroxyzine, either alone or in combination, are associated with lower health care resource utilization and lower total health care costs than patients managed with treatment regimens that include DMSO plus cystoscopy or bladder irrigation, or narcotic plus nonnarcotic agents. These results may reflect the underlying severity of the disease and accompanying symptoms among patients in the various treatment cohorts.

CLINICAL IMPLICATIONS

- Standardized treatment guidelines for interstitial cystitis (IC) are needed.
- Health care providers who treat women should emphasize early recognition and appropriate treatment of IC.

2008 Pelvic Pain Assessment Form

Howard T. Sharp, MD, Vice President, IPPS

The Board of the International Pelvic Pain Society is proud to present the 2008 version of the Pelvic Pain Assessment Form (<http://pelvicpain.org/resources/handpform.aspx>). We would like to acknowledge the hard work that was put into the original version by Dr. Metzger and the Research Committee. The original version will continue to be available through the IPPS website. The 2008 version is a result of a broad-based collaborative process with members of the Board of Directors as well as members of the IPPS. The main changes include:

- Flow: More comprehensive history, review of systems, and physical findings sections
- Pain maps for abdominal, vulvar, and vaginal findings (patients and providers)

- Additional space for the patient's description of the problem
- Additional space for health care provider's comments
- Space for additional treating health care providers
- Updated surgical history section to allow space for surgical findings
- Updated medication section to distinguish current and previous medications
- Expanded obstetrical history section
- Added section for medical / allergy / contraceptive history
- Addition of the PUF questionnaire (Thank you Dr. Lowell Parsons)
- Added Pelvic Congestion Syndrome (Pelvic Varicosity Pain Syndrome) questions
- Updated Rome III criteria for IBS
- Deleted SF-36

Though this version has been tested in several clinical sites, future updates will be easier and quicker due to the current format. You will notice that the SF-36 has been omitted. This was a result of input from several members as well as the Board of Directors. It was felt that this section was rarely scored and added significantly to the length. It will still be present in the original form. There is still no depression screening tool on this questionnaire. This is largely a result of difficulty obtaining permission to use published validated depression screening tools. We will continue to work on obtaining a validated tool. We wish to thank Dr. Lowell Parsons for giving permission to the IPPS to use his PUF questionnaire.

We hope you find the 2008 Pelvic Pain Assessment Form helpful in adding clarity to your history taking and recording of physical findings. Your feedback is welcome. Enjoy.

Mark Your Calendars!

IPPS Annual Meeting
October 16 – 18, 2008
Buena Vista Palace Hotel & Spa
Lake Buena Vista, Florida



The President's Perspective

A Time of Transition



John Steege, MD

As I sat composing this article, I learned of Paul Perry's passing. Our hearts go out to his family in this difficult time, and our thanks go out to Paul, for all he did for us as a fellow professional, friend, and physician dedicated to the treatment of pelvic pain.

Paul's passing has individual meaning for each of us. For IPPS, the organization he led with such dedication, it is a time of transition. Since its beginning in 1996, the IPPS

has developed into a vital inter-disciplinary organization of substantial size. We have established our organization during a time of substantial growth of interest in pain treatment around the world. The proper treatment of chronic pain has become politically popular, although simultaneously the regulatory environment has grown stricter. Federal funding for pain research has increased, although it remains still very difficult to obtain.

The IPPS has grown into a voice for those who are concerned with pain in women. During this time of changing leadership, we are challenged to fortify and focus that voice in ever-new directions. We are faced with the challenge of incorporating more and more non-gynecologic disciplines in the dialogue. This offers us challenges in how we organize ourselves, but at the same time provides us with wonderful opportunities for broadening our intellectual horizons.

A few examples of developments in pain research will illustrate some of the opportunities that are before us. Cutting edge research in the activation of central nervous system glial cells has provided plausible explanations for the development of narcotic resistance as well as narcotic induced hyperalgesia. The genetics of pain susceptibility are beginning to be explored through chromosomal mapping and micro-array technologies. Immortalized B-cells, components of the immune system, can now be harvested from individuals with phenotypically well-described pain syndromes, and remain as a potential biological data bank for future investigations of the roles of cytokines, neurotransmitters, and the like. Finally, the hypothetical mechanisms of nociception in endometriosis have been grown to include inflammatory components involving cytokines, as well as angiogenesis and neuroproliferation. This has led to potential new therapeutic avenues as well as opportunities to define phenotypic subtypes among women afflicted with endometriosis.

New opportunities in these new complexities may perhaps serve as a metaphor for what is needed in the leadership of our organization. If we are to be truly eclectic and inclusive, then we need to reach out to our intellectual colleagues and invite their participation in our discussions. At the same time, if they are invited to the table, we also need to open the doors to even greater levels of participation in the leadership and administration of IPPS. While

we need to attempt to achieve consensus on critical issues in gynecologic pain, "consensus" should be code for "working hypothesis." Such opinions should always serve as the nidus for further discussion rather than supplying a final answer.

Not least among our challenges is to accomplish all these goals in difficult financial times. Support from industry is ever more difficult to obtain, and we must make every effort to economize in our organizational efforts. This will probably include conversion of many of our publications from the printed word to electronic media as well as other such innovations in communication.

Over the next few months, I'll be working hard to develop several potential organizational models to present to the membership at our next meeting in October. I will make every effort to have these prepared in time for the next newsletter so that members may be able to offer their thoughtful and constructive input to this discussion. In the meantime, please call, write, or e-mail me with your thoughts and ideas. Our goal is to strengthen the organization of IPPS to further the pursuit of better understanding and treatment of chronic pelvic pain in women.

SAVE THE DATE

**Please mark your calendars for the
International Pelvic Pain Society's
2008 Annual Meeting.**

When: October 16 - 18, 2008

Where: Buena Vista Palace Hotel & Spa in
Lake Buena Vista, Florida

Call for Abstracts: April 1, 2008

Abstract Submission Deadline: July 1, 2008

Watch the mail in early summer for registration
materials and check the website:
pelvicpain.org for updates.

Call for IPPS VISION Contributions

If you wish to contribute an article or column to the newsletter, would like to submit information regarding job prospects, or have comments about the newsletter, please e-mail Ruth Gottmann at ruth@wjweiser.com.

Address Corrections Requested

Please notify the IPPS of any changes in your contact information, including change of address, phone or fax numbers, and e-mail address. This information is disseminated only to members and is used for networking, one of our primary missions.

Thank you.

Join Us

Please join us in educating ourselves on how best to treat chronic pelvic pain. With your help, we can provide relief and a more normal lifestyle for our patients. For membership information, please call (847) 517-8712 or visit our website at www.pelvicpain.org.



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