



# Pelvic Pain Regional Specialty Center, PLLC<sup>SM</sup>

*Improving the Quality of  
Life for Women<sup>SM</sup>*

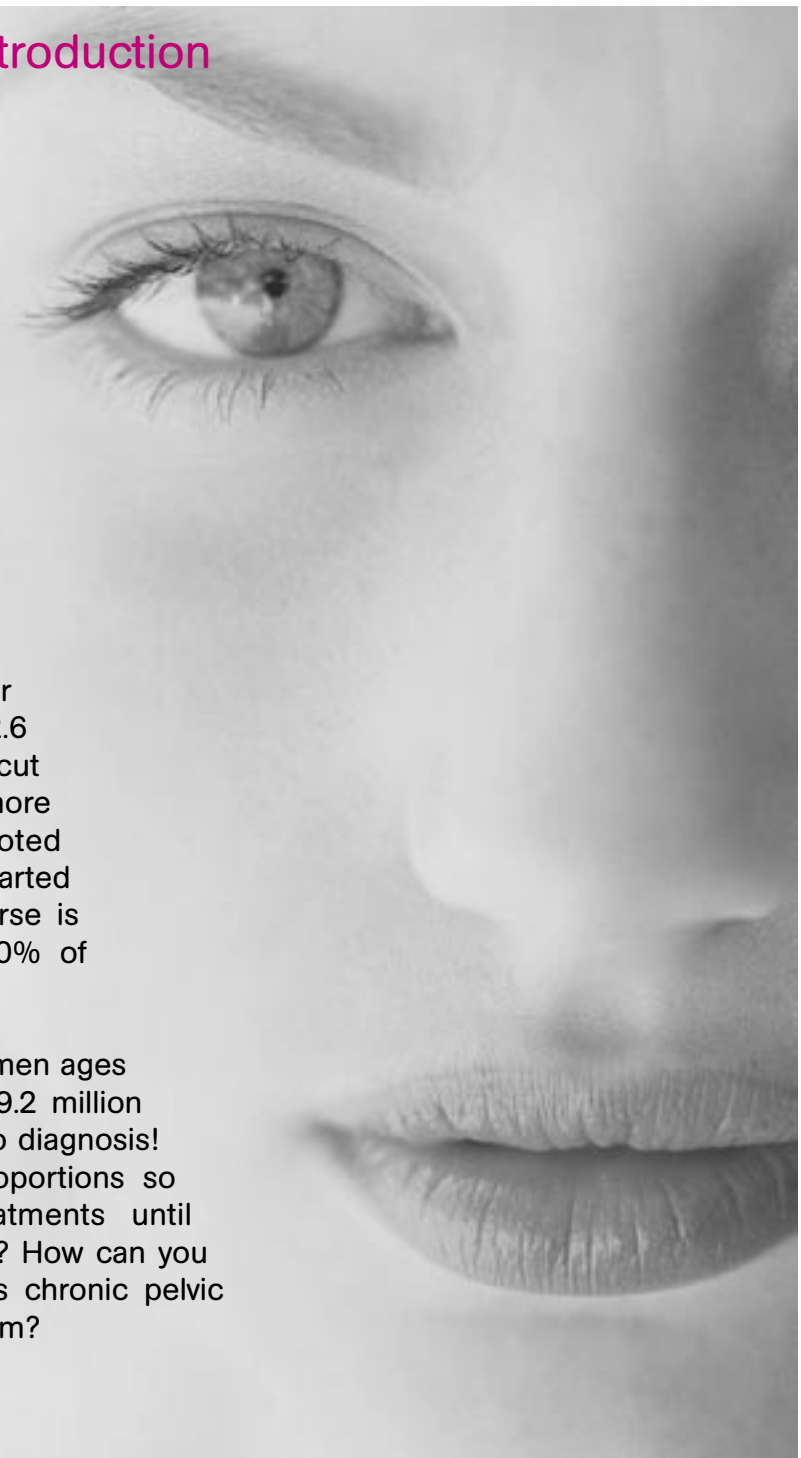
## Understanding the Principles of Chronic Pelvic Pain

### Chronic Pelvic Pain: An Introduction

Chronic Pelvic Pain (CPP) is one of the most common medical problems affecting women today. Diagnosis and treatment of CPP accounts for 10% of all out-patient gynecologic visits, 20% of laparoscopies, and 12–16% of hysterectomies at a cost of as high as \$2.8 billion annually.

The personal cost to those suffering from CPP is even greater, affecting all aspects of their lives. Pain puts about 25% of affected women in bed for much of the day for an average of 2.6 days a month; 58% must at least cut down on their usual activity one or more days a month. Emotionally, 56% noted significant changes; 47% felt “downhearted and blue” some of the time. Intercourse is compromised with pain in almost 90% of CPP patients.

Nearly 15% (1 in 7) of all American women ages 18–50 suffer from CPP. Yet of these 9.2 million sufferers, a surprising 61% still have no diagnosis! Why is this problem of epidemic proportions so poorly understood? Why have treatments until recently often proved so unsuccessful? How can you know if the problem you have truly is chronic pelvic pain versus another type of pain problem?



## What is Chronic Pelvic Pain?

The first step in solving this complex problem is to understand the definition of CPP and what factors must be present before this diagnosis can be made. Chronic Pelvic Pain is defined as any pelvic pain that lasts for more than six months.

Although acute pain may indicate specific active injury to some part of the body, chronic pain is very different. Often in CPP, the initial physical problem has lessened or even disappeared, but the pain continues because of changes in the nervous system, muscles, or other tissues.

This teaches us an important distinction:

- In acute pain, the pain is often a symptom of underlying tissue damage;
- In chronic pain, the pain itself has become the disease! Chronic pelvic pain is itself the diagnosis.

As this long-term, unrelenting pain process continues, even the strongest person's defenses may break down. This can result in associated emotional and behavioral changes. This symptom complex is termed "chronic pelvic pain syndrome".

There are six features common to all patients with chronic pelvic pain syndrome:

- 1) The pain has been present for six months or more;
- 2) Conventional treatments have yielded little relief;
- 3) The degree of pain perceived seems out of proportion to the degree of tissue damage detected by conventional means;
- 4) Physical appearance of depression is present (e.g., sleep disturbance, constipation, diminished appetite, "slow motion" body movements and reactions);
- 5) Physical activity has become increasingly limited; and
- 6) Emotional roles in the family are altered; the patient is displaced from her accustomed role (e.g., wife, mother, employee).

Thus, having associated psychological and behavioral symptoms with CPP is part of the typical expected evolution of chronic pelvic pain syndrome. Therefore, contrary to misguided beliefs, CPP is never "all in your head"; it is always a dynamic interaction of the **combined influences** of the mind, nervous system, and the body!

## Can CPP Start One Place and End Up Somewhere Else?

Not only do emotional changes occur with the long-term tension of CCP, but also other organ systems beside that system where the pain originates become involved. For instance, we all can feel our muscles tense when we have pain – this tension can in turn cause changes in bowel and bladder function. It is therefore easy to imagine that long-term pain can cause more profound persistent problems in the muscles of the pelvis and adjacent areas, the urinary tract (bladder, urethra), the bowel, and even the overlying connective tissue and skin of the pelvic area. Often these secondary processes become the predominant problem, overshadowing the original disease process which may no longer even be detected.

Important principles:

- 1) By the time pain becomes chronic, multiple systems rather than a single problem is involved in the pain process. We must look for all the causes of CCP, not a single simple cause.
- 2) In searching for these causes, look *at*, then *beyond the female pelvic organs!*

## How is Pain Perceived?

The older theory of pain (“Cartesian Theory”) is still the basic concept that many doctors and patients alike use to explain pain perception. This theory stated that specific nerve fibers (“neurons”) act almost like a simple electric wire connection carrying pain signals from damaged areas through the spinal cord directly to the cortex of the brain where pain is perceived. We now know that this concept is an oversimplification.

A newer theory called the “Gate Control Theory” likely is somewhat closer to the actual manner in which pain is perceived. Uncomfortable signals arise from injured or adversely stimulated tissues and travel through specialized nerve cells to the spinal cord. Here, these signals can be intensified, reduced, or even blocked. The spinal cord acts as a functional “gate”, letting through, blocking, or at least changing the nature of pain signals before allowing their transmission to the brain.

The gate itself is influenced by local factors (other nerve inputs in the spinal cord), and by descending signals from the higher brain centers. Thus, other internal influences through the spinal cord and brain (besides the pain itself), *and* mood *and* external environmental factors from the brain all affect the nature of the pain’s impulse transmission, and therefore pain perception. If the gates are damaged by chronic pain, they may remain open even after tissue damage is controlled, the pain will remain despite treating the originating cause; this type of pain is termed “neuropathic” pain.

## What Are the Basic Elements of CPP? How Do They Apply to Pain Therapy?

To understand how to approach the treatment of Chronic Pelvic Pain, three basic elements to chronic pain should be considered:

### ***Pathology at the Site of Origin***

Obviously, if the original source of tissue injury remains, pain will continue. This is called ***pathology at the site of origin*** (e.g., endometriosis, adhesions, infection, etc.).

### ***Referred (Antidromic) Pain***

The ***Referred (Antidromic) Pain Concept*** is of critical importance. Two types of nerves exist: ***visceral nerves*** carry impulses from intra-abdominal and thoracic structures into the spinal cord, while ***somatic nerves*** innervate superficial tissues, muscle, and skin. Visceral nerves and somatic nerves may synapse (meet) with the same nerve cell in the spinal cord and in this way have an influence on each other. When visceral nerves are chronically stimulated with unrelenting pain, the impulse will spill over in a reverse manner into the somatic nerve, which will carry the pain impulse in reverse fashion to areas of the abdominal wall, pelvic muscles, and superficial tissues. Specific areas of tenderness develop at those sites termed “trigger points”, or referred pain. Although the trigger points may begin as a superficial expression of internal (visceral) pain, they may evolve into the patient’s main source of pain. In some cases treatment of the trigger points may significantly reduce pain. In other cases, the visceral tissue injury must also be treated (surgical removal of endometriosis, adhesions, etc.).

### ***Central Modulation by the Brain***

The brain influences emotions and behavior and interacts with the spinal cord, modifying the perception of the visceral and referred pain. For instance, depression will allow more pain signals through to the brain. This is called ***central modulation by the brain***. Central influences must also be treated with a variety of methods, including various psychological, physical, and pharmacologic (drug) therapies. ***The simultaneous treatment of all levels of the pain process must be accomplished if there is to be any hope of success.***

## How Do I Find Out if I Have CPP?

The Pelvic Pain Regional Specialty Center, PLLC is the first and only health care facility in the State of Kentucky dedicated ***exclusively*** to the evaluation, treatment, and management of Chronic Pelvic Pain (CPP). The state-of-the-art comprehensive assessments and physical examinations we perform at our Center often tell us more about the reasons for your pain than any laboratory test or procedure. Our evaluation also will tell us which tests are appropriate for you specifically and will eliminate unnecessary testing.

Call **(502) 899-3009** to schedule an appointment with the Pelvic Pain Regional Specialty Center. Located on Dutchman's Lane in Louisville, Kentucky (in the East End's Dupont Area)

**We're dedicated to improving the quality of life for women!**