

A Systematic History for the Patient with Chronic Pelvic Pain

James E. Carter, MD, PhD

ABSTRACT

Chronic pelvic pain is a source of frustration to both the physician and the patient. Physicians have been ill equipped by their training to confront the multifaceted nature of the complaints of patients with chronic pelvic pain. Patients have experienced a repetitive dismissal of their complaints by physicians too busy in their practices to address their problems comprehensively. The approach to the patient with chronic pelvic pain must take into account six major sources of the origin of this pain: 1) gynecological, 2) psychological, 3) myofascial, 4) musculoskeletal, 5) urological, and 6) gastrointestinal. Only by addressing and evaluating each of these components by a very careful history and physical examination and by approaching the patient in a comprehensive manner can the source of the pain be determined and appropriate therapy be administered.

This article was developed to provide the clinician with a set of tools and a methodology by which the patient with this complaint can be approached.

Key Words: Chronic pelvic pain, Laparoscopy.

INTRODUCTION

Chronic pelvic pain accounts for 10% of all office visits to a gynecologist¹ and for over 40% of laparoscopies² performed by gynecologists. There is increasing awareness that chronic pelvic pain cannot be successfully managed using a simplistic approach.³ Technology has resulted in many advances in our ability to evaluate patients who complain of pelvic pain, including use of magnetic resonance imaging technology, vaginal probe with doppler flow ultrasound, hysteroscopy, and laparoscopy. However, the lure is to use these increasingly expensive and invasive tests and procedures to evaluate all patients with the complaint of chronic pain in the pelvic area. It is important for the gynecologist to recognize that patients who complain of chronic pelvic pain may be afflicted by pathology in any one of the six areas. In fact, a seventh area of concern, that of neuropathic disorders, may also be considered in the differential in the patient with chronic pelvic pain.

As this article will describe, a systematic approach to the patient with chronic pelvic pain can provide a more accurate diagnosis while avoiding, until absolutely required, those costly and frequently non-revealing technological procedures. Procedures that also may expose the patient to unnecessary risk while searching for the cause of her chronic pain.

This article has been prepared in the hope that the practitioner, both as an individual and as part of the health-care system, will find some valuable information to assist in the evaluation and treatment of this very difficult problem.

DEFINITION OF CHRONIC PELVIC PAIN

Chronic pelvic pain can be defined as nonmenstrual pain of three or more months duration that localizes to the anatomic pelvis and is severe enough to cause functional disability and require medical or surgical treatment.² Chronic dysmenorrhea or menstrual pain of six or more months' duration that causes functional disability and requires medical or surgical treatment is also appropriately included in the definition.

Associate Clinical Professor
University of California Irvine
College of Medicine

Address reprint request to: James E. Carter, MD, PhD, FACOG, Medical Director, Women's Health Center of South Orange County, Inc., 26732 Crown Valley Parkway, Suite 541, Mission Viejo, CA 92691. Telephone: (949) 364-5802, Fax: (949) 364-2871, E-mail: 76053.304@compuserve.com

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LAPAROSCOPIC FINDINGS IN CHRONIC PELVIC PAIN PATIENTS

During the 1980s, laparoscopic evaluations for chronic pelvic pain revealed abnormalities that had a frequency from as low as 2% to as high as 37%.² In 1991, 74% of 227 women with the disorder had laparoscopic findings consistent with endometriosis.⁴ The increase in the finding of endometriosis is consistent with the increase in the association between the disease and infertility. The diagnosis of endometriosis in infertile women rose from 42% in 1982 to 72% in 1992, an increase that is attributed to greater awareness of subtle lesions of the disease.⁵ In 1984, laparoscopy was performed on 100 women who had pelvic pain in the same location for a minimum of six months. Eighty-three percent had abnormal pelvic organs compared with 29% of an asymptomatic group.⁶ Adhesions were the most common pathology, present in 38% of the subjects with pelvic endometriosis diagnosed in 32% of the symptomatic group. In a 1994 study of 141 patients with a primary diagnosis of chronic pelvic pain, 67% were found to have endometriosis, which was associated with other abnormalities of the pelvis, such as adhesions, leiomyomas, appendiceal abnormalities and hernias. Thirteen percent had endometriosis as their only pathological finding.⁷ When focal tenderness was found on pelvic examination and titers for chlamydia were negative, 83% of these women had endometriosis at the site of the tenderness.⁸

REASONS FOR INCREASED FINDINGS OF ENDOMETRIOSIS IN PELVIC PAIN PATIENTS

The increase in the findings of endometriosis at laparoscopy from as low as 2% to as high as 84% in pelvic pain patients can be attributed to three improvements: technical improvement in instrumentation, allowing better visualization at laparoscopy; an increased appreciation of abnormalities of the pelvis, including all the subtle aspects of endometriosis as well as the appearance of other abnormalities, such as chronic appendicitis and hernia formation; improvements in the manner in which patients who are provided with a laparoscopy are screened for the other abnormalities that are important differentials.

According to a recent American Association of Gynecologic Laparoscopists (AAGL) survey, 56% of all laparoscopies are being performed for a diagnosis of chronic pain.⁹ However, according to an analysis per-

formed on 11 studies of patients with chronic pelvic pain, less than 50% of patients with chronic pelvic pain were helped by laparoscopic treatment, and approximately 40% of the patients had no apparent pathology at laparoscopy.²

CURRENT SYSTEM OF TRIAGE

There is a tendency to respond to a patient's complaint of pelvic pain in the following manner: The patient calls the physician and states that she is having pain and desires an appointment. In a large health system, she is triaged by the appointment clerk with a simple question of the region of the pain. The patient identifies the anatomic area as being in the pelvic area and, therefore, she is referred to a women's health specialist. The patient may also refer herself directly to a gynecologist. The patient is screened as having already identified pain in the pelvic area and, therefore, the assumption is that the pain is of an organic nature related to the internal pelvis. After a brief history and physical examination, laparoscopy is then scheduled to identify the source of the pain.

Pathology related to the pelvic anatomy is identified in less than 50% of the cases. Therefore, over half of these patients are not assisted by the laparoscopic procedure.²

The patient is then frequently given a referral for psychiatric evaluation with the comment that, since the laparoscopic examination of the pelvis is negative, the pain must be associated with some psychological disorder ("the pain is in her head").

The differential diagnosis of the patient with chronic pelvic pain includes the following:

- 1) Gynecological disease, including endometriosis, adhesions (chronic pelvic inflammatory disease), leiomyoma, pelvic congestion syndrome, and adenomyosis
- 2) Gastrointestinal disease, including irritable bowel syndrome, diverticulitis, diverticulosis, chronic appendicitis, and Meckel's diverticulum
- 3) Genitourinary disease, including interstitial cystitis, abnormal bladder function (bladder dyssynergia), and chronic urethritis
- 4) Myofascial disease, including fasciitis, nerve entrapment syndrome, trigger points and hernias (inguinal, femoral, spigelian, umbilical, and incisional)

- 5) Skeletal disease, including scoliosis, L1-L2 disk disorders, spondylolithesis, and osteitis pubis
- 6) Psychological disorders, including somatization, psychosexual dysfunction, and depression.

There is another condition that may be related to complaints of pelvic pain in those individuals who have had pelvic surgery and now are re-experiencing pain. This is a syndrome whose parallel is the "phantom limb" syndrome in amputees. A neuropathy may develop that is generated from regrowth of nerve tissue or development of a neuroma that causes a reinstigation of the firing of the neural elements in the brain, which had previously identified an area as being a source of pain.

With such a broad range of anatomical and disease entities that may exist in the patient with chronic pelvic pain, it is not surprising that attempts to identify the source of pain by immediate laparoscopy would result in a very low percentage of positive findings.² Prior to any operative procedures being performed, a very careful history must be obtained from these patients. However, obtaining a history from a patient in pain is a very difficult enterprise because patients who are in pain are frequently depressed and find accurate communication difficult.

To obtain useful information by interviewing a patient with pain, a systematic approach must be used. This type of systematic approach was first described by Kresch,¹⁰ who developed a series of forms to obtain information from the pelvic pain patient. The use of these types of forms for acquisition of information has been found to be very useful in the evaluation of patients with pelvic pain. Forms provide the interviewer with the opportunity to obtain detailed histories and give the interviewer data that can be analyzed with the use of the Wilcoxon Signed Rank Test for comparison of pre- and post-treatment states.¹¹ Five sets of forms are recommended in evaluating the history for a pelvic pain patient: 1) Monthly Pain Calendar, 2) Symptoms Checklist, 3) Pain Questionnaire, 4) Pain Mapping, and 5) Psychological Assessment (related history form). These forms are derived from the original Kresch style but use scaling on a 0 to 10 basis to allow the individual to more completely identify the level of discomfort and to provide the researcher with an opportunity to evaluate pre- and post-treatment based on known statistical evaluation tools.

The addition of the Beck Depression Inventory¹² to these forms is a useful adjunct to identify patients for whom immediate psychological evaluation should be provided. It may be helpful to perform the Minnesota Multiphasic Evaluation¹³ for those patients in whom psychological disorders are suspected or are felt to play a major part in the patients' complaints.

EVALUATION FORMS

Monthly Pain Calendar

The patient is requested to complete the Monthly Pain Calendar (**Figure 1**) by grading her symptoms on a scale of 0 to 10, with 0 indicating no pain and 10 indicating the worst pain that she has experienced. By utilizing numbers from 0 to 10, a scalar ranking is obtained that allows the practitioner to evaluate pre- and post-treatment levels using the Wilcoxon Signed Rank Test. In this manner, data is obtained that can be used for determining the effectiveness of treatment. In addition, the use of this type of form allows multiple practitioners within a clinical setting to care for patients with consistency and to follow their progress. It is helpful to group the symptoms according to the six major diagnostic categories. In this way, the patient is able to categorize her complaints by six different areas of concern.

Category 1 of the Monthly Pain Calendar is gynecologic. The patient is asked to identify the times of her periods and to identify whether the periods are light, moderate or heavy, again by using a 0 to 10 scale, with 10 being the heaviest bleeding she has experienced. The use of medications is recorded by type of medication and the amount of medication taken. Mid-pelvic cramps and cramps in other areas of the pelvis are then recorded as well as left pelvic pain, right pelvic pain and low middle pain. Pain during sexual intercourse and pain after sexual intercourse are also both recorded.

Musculoskeletal issues are dealt with by questions on backache and general aches and pains. The gastrointestinal system is evaluated with questions relating to pain before, during and after bowel movement. Issues relating to urinary tract problems are monitored with questions on pain, urgency and frequency during each day of the month. Psychological issues are then considered with questions relating to anger, anxiety and depression. The patient is then asked to identify any myofascial pain, specifically abdominal wall pain, on a scale of 0 to 10.

MONTHLY PAIN CALENDAR																																
Day of cycle	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Date																																
Gynecological																																
Menses																																
Medications																																
Cramps pelvic																																
Cramps other																																
Pelvic pain left																																
Pelvic pain right																																
Pelvic pain low middle																																
Pelvic pain other																																
Painful sexual intercourse																																
a. during																																
b. after																																
Gastrointestinal																																
Painful bowel movement																																
a. before																																
b. during																																
c. after																																
Genitourinary																																
Urinary problems																																
a. pain																																
b. urgency																																
c. frequency																																
Psychological Assessment																																
Depression																																
Anger																																
Anxiety																																
Musculoskeletal																																
Backache																																
General aches/pains																																
Myofascial																																
Abdominal wall pain																																
Menses:	Grading of symptoms and/or complaints:																	For medications, list the initials and medication used.														
0 - None	0 - No symptoms																															
10 - Extremely heavy	10 - Symptoms as severe as the worst I have experienced																															
By completing these forms, permission is given for use of this data in an anonymous manner for evaluation, research and publication.																																

Figure 1. Monthly Pain Calendar.

The patient is asked to keep this form for each day of the monthly cycle and to identify the date that she starts the form. For purposes of ensuring that the patient is completing the form correctly, give this form to the patient and request that she complete this form for the days of the cycle prior to the current visit. Ask her the date of the first day of her last period, and ask her to complete this form for each cycle day since that day. Give her approximately 15 minutes to work on this form and then return to evaluate how she is doing with the form. If she understands the questions and how to complete the form, have her complete the form up to the date of this visit. Give her additional forms to take home and have her

complete the form for every day for the entire time she is in treatment. This establishes a contractual relationship between the caregiver and the patient, which ensures that the patient will complete the information that the caregiver requests on a daily basis in order for the caregiver to provide therapy to the patient.

Symptoms Checklist

Figure 2 shows an example of a form that is divided between the various symptom categories.

In the gynecologic area, the patient is asked to rate the pain she experiences with her periods, ovulation and

intercourse. In addition, she is asked how heavy her bleeding is with her periods and whether her periods are irregular. In the gastrointestinal area, she is asked to comment on a series of symptoms, including pain with bowel movement at the time of periods and at non-period times, urgency of bowel movement, blood in the stool, bloating, constipation, diarrhea, nausea and vomiting. The musculoskeletal and myofascial areas are dealt with together with questions on the level of pain in the lower back, as well as pain with certain movements and activities. The patient is also asked to identify those movements and activities. The psychological area is dealt with by requesting the patient to rank her stress, depression, anxiety and anger, from 0 to 10. In the urinary tract area, the patient is asked to comment on the level of pain she experiences with urination and whether she has problems with frequency. In addition, the patient is asked to comment on other areas that may be

of concern, such as whether she is experiencing hot or cold flashes and whether she is experiencing fatigue or headaches.

It is very helpful with a patient who is experiencing chronic pain to have her complete forms rather than attempt a formal question and answer interview at the very beginning of her visit. By having her complete these forms, the physician is able to obtain the maximum amount of information concerning the patient's complaints while also being in a position to spend time with other patients.

Pain Questionnaire

The third form is a questionnaire, which requires the physician to participate directly with the patient in her evaluation (Figure 3). On this form, the patient is specifically asked by the caregiver to identify locations of

SYMPTOMS CHECKLIST		
Symptoms Checklist	Grade	Comments
GYNECOLOGICAL		
1. Painful periods	_____	_____
2. Painful ovulation	_____	_____
3. Painful intercourse	_____	_____
4. Other abdominal pain	_____	_____
5. Heavy bleeding with period	_____	_____
6. Irregular periods	_____	_____
7. Chronic yeast	_____	_____
GASTROINTESTINAL		
1. Painful bowel movement - with menses	_____	_____
2. Painful bowel movement - anytime	_____	_____
3. Urgency with bowel movement	_____	_____
4. Blood in stool	_____	_____
5. Bloating	_____	_____
6. Constipation/diarrhea	_____	_____
7. Nausea/vomiting	_____	_____
MYOFASCIAL/MUSCULOSKELETAL		
1. Lower back pain	_____	_____
2. Pain with certain movements/activities	_____	_____
URINARY TRACT		
1. Pain with urination	_____	_____
2. Frequency of urination	_____	_____
PSYCHOLOGICAL		
1. Stress	_____	_____
2. Depression	_____	_____
3. Anxiety	_____	_____
4. Anger	_____	_____
5. PMS - three worst symptoms	_____	_____
A. _____		
B. _____		
C. _____		
For symptoms: Grade 0 - No Symptoms Grade 10 - Symptoms (pain, etc.) as severe as the worst I have experienced		

Figure 2. Symptoms Checklist.

PAIN QUESTIONNAIRE				
Date: _____ Name: _____				
Age: _____ G: _____ P: _____ LMP: _____ Cycle day: _____				
1. Pain Location (List each dif. first, location and number it)				
2. Date First Noted				
3. Events Preceding Pain				
4. Pain Description (Objectives that patients use to describe typical pain and list cycle days)				
5. Pain Intensity (Rate each pain)				
PAIN LOCATION	ONSET	EVENTS PRECEDING	DESCRIPTION	RATE PAIN FROM 0-10
6. Overall interference of pain with life (zero to 10)				
Work	School	Social Activities	Childcare Exercise	Sports and Relationships
7. Description of things that:				
INCREASE PAIN		DECREASE PAIN		
Intercourse	Yes No	Lying down	Yes No	
Bowel movement	Yes No	Heating pad	Yes No	
Urination	Yes No	Hot bath	Yes No	
Physical activities	Yes No	Medication	Yes No	
Other:	Yes No	Other:	Yes No	
8. Prior treatment or medical workup:				
Surgeries:		Date:	Diagnosis:	
GI Studies:		Date:	Diagnosis:	
Other:				
9. Use of medication:				
DATES:		EFFECTIVENESS:		
A. _____				
B. _____				
C. _____				
D. _____				
10. Current symptoms other than pain:				
A. Bleeding				
B. Bowel problems/nausea				
C. Headache				
D. Fatigue				
E. Other				

Figure 3. Pain Questionnaire.

PAIN MAPPING

Instructions

Put highest intensity in each square that is applicable.

May use color codes for different pains.

Refer to Form 3 for pain number.

Figure 4. Pain Mapping.

pain and to reference this pain to Form 4, the body grid. For each pain identified on Form 3, the patient is asked to locate the pain and identify the level of pain on a scale of 0 to 10, with 10 being the worst pain she has ever experienced.

Case Study 1

A 34-year-old G2P2 requested a second opinion regarding a recommendation that she have a laparoscopic right salpingo-oophorectomy for her problem with severe right-sided pain. It was evident from the first two forms that she did have significant right-sided pain, which increased and became very much disabling during time of ovulation. However, she stated she first noticed this pain as early as age six. Since ovarian pain is very rare at age six, it was necessary to determine what occurred prior to the time the patient noticed the pain. When

RELATED HISTORY FORM

A. Experience with other medical people or family/friends?
(Ex: Have you seen other doctors? What did they tell you?)

B. How are you coping with pain currently?

C. Do you have any history of a major episode of depression?

D. Current symptoms of depression? Yes No

(Underline appropriate words and explain below)

Mood disturbances	Loss of pleasure in activities
Feelings of hopelessness	Feelings of worthlessness
Low energy	Loss of appetite
Sleep disturbance	Thoughts/plans of suicide

E. Any history of sexual abuse? _____ What ages? _____
By whom? _____

Has anyone ever touched you in any way that made you feel uncomfortable?
_____ What ages? _____ By whom? _____

Has anyone ever asked you to touch them when you did not want to? _____
What ages? _____ By whom? _____

Figure 5. Related History.

asked to describe the events that preceded her pain, she remembered that at age five she had been taken to the hospital with severe abdominal pain, temperature, nausea and some vomiting. She nearly underwent an operation, but she improved and was sent home. Since that time, she had experienced pain on her right side, and sometimes that pain was made worse with exercise and, at times, even caused her to experience extremely sharp pain along the right side. When she started ovulation, she found that this was painful as well. The pain had been getting progressively worse with ovulation for the last several years. This patient consented to a laparoscopic appendectomy and lysis of adhesions. She was found to have adhesions from the periappendiceal area over the right ovary and a firm, fibrotic, retrocecal appendix. The pathology report was chronic appendicitis and adhesions.

ACTIVITY LEVELS

After describing the pain location, intensity, first occurrence and antecedent events, the patient is asked to describe the overall effect of the pain on life activities, with 0 being “no interference” and 10 being “cannot perform normal functions.” She is requested to describe the effect of this pain on work, school, social activities, child-care, relationships, sports, exercise and any other categories the patient considers important.

Case Study 2

This 37-year-old G1P1 requested a second opinion concerning a recommendation for a laparoscopy to evaluate her pain. She described her pain as being in the lower pelvic area, specifically on the right side. She had noticed a sudden onset and stated the pain became worse at time of menses. However, this pain did not interfere with work, school life, social activities or child-care relationships. It did interfere with sports. The pain interfered severely with her ability to ski, especially with her ability to assume a crouching position. Also, she was unable to do her standard knee thrust exercise in which she placed her hands on the ground, held up her body with her hands and her toes and then thrust her knees toward her head. This type of rigorous exercise was performed 100 times each morning by this fitness instructor.

The examination of this patient concentrated on the areas of her complaints, specifically along the anterior abdominal wall at the insertion of the rectus fascia to the pubic bone. With careful palpation of this area, it was possible to locate an area of significant tenderness. Having identified that this pain was in fact myofascial in nature, the patient was advised to discontinue her exercise, use nonsteroidal anti-inflammatories, and she was given trigger-point injection therapy into the area of pain. The pain resolved with this treatment, and the patient was able to go back to her normal activities. Laparoscopy was not necessary and would not have been helpful in her diagnosis.

PAIN MODERATORS

Patients are asked to describe those things that increase and decrease pain, specifically with emphasis on areas such as intercourse and bowel movement. Generally speaking, a patient who complains of pain with deep intercourse (deep dyspareunia) will frequently be found

to have nodules and areas of tenderness in the uterosacral ligaments, rectovaginal septum, or the posterior cul-de-sac consistent with endometriosis.

A careful evaluation of prior treatment and medical work-ups is performed, and all medical records are reviewed. The use of medications is discussed and recorded, as well as other symptoms besides pain.

Pain Mapping

The fourth form is for pain mapping (**Figure 4**). This body grid is very useful for patients to describe the areas of their pain. The patient is asked to mark on the grid, on a 0 to 10 scale, the location of her pain.

Case Study 3

This patient requested a second opinion regarding a recommendation that she have a hysterectomy for her low back pain. She described an increasingly intense pain in her lower back that was severely exacerbated at the time of her period. When asked to identify the location of her pain, this patient placed a pen in the mid-portion of her back and then drew a line down the right side through the buttock and along the back of the right leg. Evaluating this patient then required that she stand up and turn around so that her back could be examined. She bent forward, and the outline of the back was visualized. This patient had a well-compensated, 40° scoliotic curvature of her spine, and measurement revealed that her right leg was 0.5 cm shorter than her left leg. It was possible to resolve this patient's problem with her pain by giving her an orthotic lift to equalize her leg length. Physical therapy was also provided. She may require back surgery if her scoliosis further decompensates. Hysterectomy was not appropriate therapy for this patient.

The use of these forms allows the physician to efficiently determine the source of pain. They aid the physician in the search for a proper diagnosis for which proper treatment can then be prescribed.

Related History Form

The fifth form, which should be used for evaluation of the patient with pain, relates to psychological history. It is called the Related History Form (**Figure 5**) and requests information on experiences with other medical personnel or family and friends, that is, what others have told her. It also asks how she is coping with her pain,

whether she has a history of depression and whether she is experiencing recurrent episodes of depression. The patient is then asked to underline the appropriate words that describe her feelings such as mood disturbances, feelings of hopelessness, low energy, sleep disturbance, loss of pleasure and activities, feelings of worthlessness, loss of appetite and thoughts or plans of suicide.

The patient also is requested to recount any episodes of sexual abuse, at what ages and by whom, and whether anyone has touched or in any way made her feel uncomfortable in a sexual manner, at what ages this occurred, and by whom. Also, the patient is asked if anyone has ever asked her to touch them when she did not want to, at what age(s) and by whom.

CONCLUSION

Through the use of a very carefully constructed history for the patient with chronic pelvic pain, more accurate diagnosis can be obtained. When this rigorous approach to the history is used, surgical intervention can be more focused and directed, and surgery can be avoided in those patients for whom it is not suitable. When combined with a comprehensive and detailed physical examination specifically designed for the patient with chronic pelvic pain, with the use of these forms, the author has been able to arrive at a diagnosis that responds to medical or conservative therapy in fully 58% of cases. The remaining 42% of cases do require surgical intervention. However, by the use of a comprehensive and detailed history and physical examination, the surgical intervention can be focused and appropriately applied.

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