

THE  
HARVARD  
GUIDE TO  
WOMEN'S  
HEALTH

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This book is meant to educate, but it should not be used as a substitute for personal medical advice. The reader should consult her clinician for specific information concerning her individual medical condition. The authors have done their best to ensure that the information presented here is accurate up to the time of publication. However, as research and development are ongoing, it is possible that new findings may supersede some of the data presented here.

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# The Harvard Guide to Women's Health



To our families:

Richard, Nicholas, and Christopher Mollica

Russell, Benjamin, Samuel, and Joshua Eisenstat

James, Pallas, Sage, and Solon Snider

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## Preface

For most women, being well informed is an essential element of good health. Research has shown clearly that when a woman goes to her doctor with a health problem, the two most important factors in achieving a good outcome are the amount of information communicated between the patient and her doctor and the active participation by the patient in making decisions about her care. Unfortunately, in today's managed care environment, physicians often have more information to share than they have time to share it. We wrote this book to help bridge that gap: to give women the knowledge they need to communicate effectively with their doctor, and to become partners in taking good care of their health.

*The Harvard Guide to Women's Health* aims to answer the kinds of questions physicians hear every day from their women patients—questions such as “Is this normal?” “Do I need to worry about this?” “What can be done about this?” “What's going to happen to me now?” With each of the major disorders listed in this A-Z Guide (encompassing over 300 entries), we try to explain who is likely to develop the disorder, what the typical symptoms are, and how the condition is evaluated and treated. We also outline any preventive steps a woman can take to improve her chances of avoiding the problem or its recurrence.

Some kinds of questions on the minds of women patients often do not get addressed in a busy office visit—questions about anxiety, depression, occupational hazards, postpartum issues, and stress. Others questions are never clearly articulated, often out of a sense of privacy, embarrassment, or perhaps even denial—questions about domestic violence, sexual preference, sexual response, and substance abuse. In this book we attempt to answer some of these unspoken questions about psychological and social factors that so often have a profound effect on a woman's physical well-being. The reader will find informative entries on antianxiety and antidepressant drugs, panic and phobias, posttraumatic stress and psychosomatic disorders, sexual

abuse and incest, and other important topics in the area of women's emotional and mental health.

Sometimes what worries a woman most is a single symptom: a sudden pain in her abdomen, back, chest, or head; fatigue, hair loss, incontinence, or insomnia; the appearance of an unusual mole or varicose veins. Many entries in *The Harvard Guide to Women's Health* look at specific symptoms such as these and explain the range of disorders that could account for them.

A major focus of this *Guide* is, naturally, on diseases that may affect a woman's reproductive system. Topics range from breast lumps, cervical cancer, endometriosis, and ovarian cysts to pelvic inflammatory disease, uterine fibroids, and yeast infections. The symptoms, treatment, and prevention of sexually transmitted diseases are described in detail, and the pros and cons of birth control options are assessed, including natural birth control methods and hormonal contraception.

But disorders of the reproductive system are not the whole story when it comes to women's health. In the last decade, researchers and physicians alike have begun to realize that many diseases common to both sexes manifest themselves differently in women. For example, heart diseases—angina, aortic stenosis, congestive heart failure, coronary artery disease, even high blood pressure—sometimes follow a different course in women than in men, for reasons that are both biological and social. For every common disease described we try to call attention to the ways in which the incidence, symptoms, evaluation, and treatment may be different for women.

We pay special attention to the impact of common diseases on the outcome of pregnancy, and to the effect of pregnancy itself on the course of a disease. Autoimmune disorders such as lupus and multiple sclerosis, as well as diabetes, epilepsy, kidney disorders, and thyroid disease, are among the dozens of conditions with special implications for women who are pregnant or are thinking about becom-

ing pregnant. Among the other reproductive issues discussed are abortion, breastfeeding, genetic counseling, infertility, midwifery, morning sickness, postpartum psychiatric disorders, and pregnancy after age 35.

The health needs of women change dramatically over the life span. Entries on such topics as body image, depression, exercise, and nutrition are organized around the changing circumstances of women as they age and their impact on health. We also try to examine some of the special health issues that may concern younger and elderly women as well as the family members who may care for them. Anorexia nervosa and Alzheimer's disease are just two of many examples.

In entries on standard clinical practices such as blood tests, immunizations, Pap tests, physical examinations, and other screening procedures, we point out the importance of taking into account a woman's age and reproductive status. In addition, many techniques used in the diagnosis and treatment of disease are described, and their risks and complications are assessed. These include biopsies, colposcopy, cryosurgery, hysterectomy, hysteroscopy, laparoscopy, laser surgery, lumpectomy, mammography, MRI, and others.

And finally, the health of modern women has been inextricably linked with their appearance. In discussions of such topics as breast implants, cosmetics, dieting, foot care, hair dyes, liposuction, nail care, orthodontia, sclerotherapy, and skin care we try to take an honest look at potential benefits and risks so that women can make informed decisions

about the products they buy and the procedures they choose to undergo.

The main topics covered in *The Harvard Guide to Women's Health* are listed alphabetically in the table of contents at the beginning of the book. The Index at the back directs the reader to discussions of hundreds of additional topics that are not main entries (such as biofeedback, bunions, migraines, pleurisy, and so on), or to topics that appear under another name (such as high blood pressure instead of hypertension). At the end of each entry, "Related entries" lists other topics that expand on some aspect of the discussion. The section entitled "For More Information," which begins on page 655, lists organizations, hotlines, pamphlets, books, newsletters, and online resources that offer additional information on topics of special interest.

This guide draws on the expertise generously shared by physicians at Harvard Medical School, Massachusetts General Hospital, Brigham and Women's Hospital, and elsewhere. Their specific contributions are described in the Acknowledgments. To the many colleagues, friends, and especially patients who have inspired this project, we would like to express our hope that *The Harvard Guide to Women's Health* will be useful in promoting the good health and well-being of women everywhere.

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Terra Ziporyn, Ph.D.

# **The Harvard Guide to Women's Health**



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## Abdominal Pain

The abdomen is not a single organ but rather a section of the body that contains a number of different organs and other tissues. Pain in this area can signal hundreds of conditions, ranging from mild intestinal gas to severe inflammations, infections, and cancers. Usually a temporary abdominal twinge or cramp is no reason for concern, but any incapacitating or unremitting pain could be a surgical emergency that requires immediate medical attention. *Anyone who suddenly develops severe abdominal pain that lasts more than an hour should consult a clinician (by telephone or otherwise) as soon as possible.*

Doctors often divide the abdomen into four quarters or quadrants by drawing an imaginary line down through the navel from the bottom of the chest to the top of the pubic area, and then crossing this line with a horizontal line that runs through the navel (see illustration). Pain can then be said to occur in the right upper quadrant, for example, or in the lower left quadrant. It is also possible for pain to occur right in the middle of the abdomen, either above or below the navel.

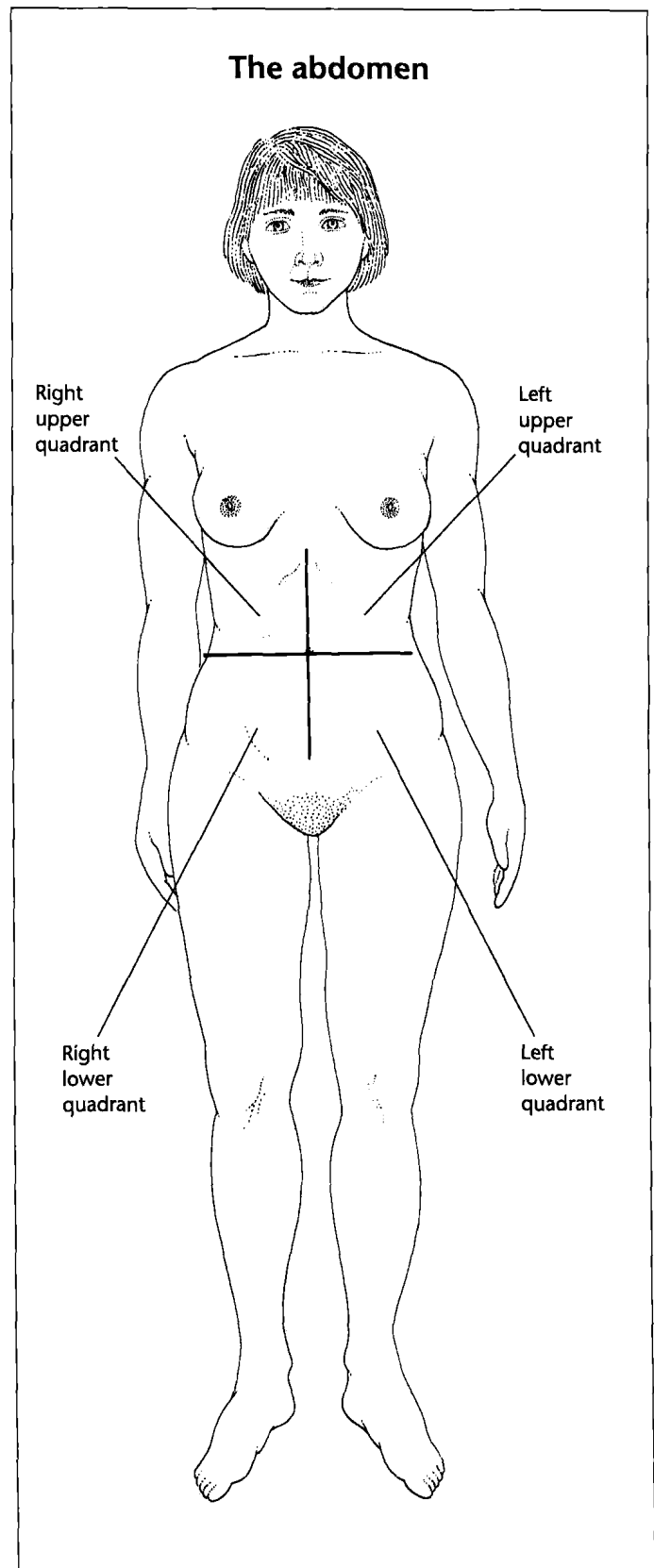
Treatment varies with the nature of the condition underlying the pain. The patient can speed up the process of finding the right treatment by supplying information about the timing, severity, and location of the pain—which helps the clinician narrow down its cause.

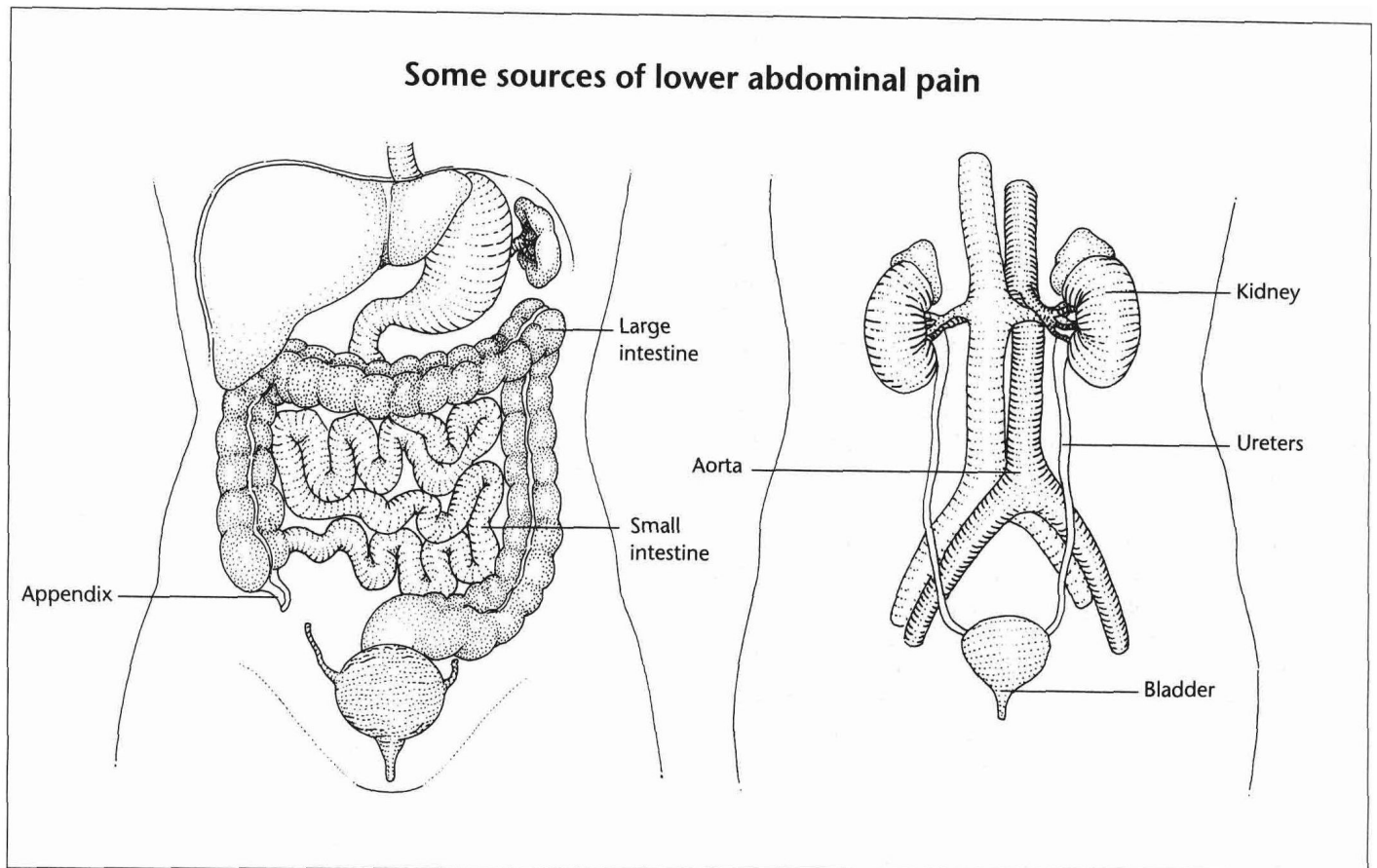
### ► Pain in the lower abdomen

Abdominal pain in the lower two quadrants of the abdomen is not clearly distinguishable from pelvic pain and can result from a large number of disorders of the reproductive organs: pelvic inflammatory disease, endometriosis, adenomyosis, ovarian cysts, ovarian cancer, fallopian tube cancer, endometrial polyps, endometrial cancer, dysmenorrhea, premenstrual syndrome, miscarriage, urinary tract infections, and uterine fibroids, to name a few (see entries under these disorders, and see also pelvic pain).

Here is a brief description of some common conditions, in addition to those just listed and described elsewhere, which may account for lower abdominal pain in women.

**Appendicitis.** Severe or persistent abdominal pain may sometimes indicate appendicitis. A good rule of thumb is to assume it does until proven otherwise. This is particularly true if the pain occurs in the lower right or moves from around the navel to the lower right side. The appendix is a small sac attached to the first part of the large intestine (the





cecum; see illustration). It has no known function, but it frequently becomes infected or inflamed and must be removed surgically as soon as possible. Otherwise it may rupture and cause life-threatening infection of the abdominal lining (peritonitis).

Often the first sign of appendicitis is a dull pain or tenderness around the navel or on the lower right side of the abdomen. If any abdominal pain is specific to these areas, a clinician should be consulted. Even a dull pain in this area, particularly if it persists for more than 12 hours, may signal appendicitis. Other symptoms may include nausea, lack of appetite, fever, vomiting, and constipation. Appendicitis is particularly common in teenagers and young adults, but it can occur in anyone. If it is diagnosed and treated promptly, it is rarely fatal.

**Aortic aneurysm.** As women grow older, they also have to consider the possibility that sudden, severe abdominal pain may signal a ruptured aortic aneurysm. In this condition—which also requires immediate medical attention—the walls of the abdominal branch of the aorta (the major artery in the body; see illustration) balloon out and eventu-

ally leak or burst. This is thought to occur after the aorta has been subjected to many years of arteriosclerosis (hardening), a process probably exacerbated by untreated high blood pressure. Although it is quite common to have an aneurysm in the aorta without any symptoms—or with only a sort of pulsating sensation in the abdomen—a ruptured aorta is catastrophic and can quickly result in severe pain, shock, unconsciousness, or even death.

In some people, however, a slow leak may occur rather than an abrupt rupture, in which case the more serious consequences may be presaged by a few days of mild abdominal aching. This condition needs to be promptly evaluated so that it can be repaired surgically before major damage occurs.

**Ectopic pregnancy.** Another life-threatening source of lower abdominal pain that needs to be considered by any woman with even a remote chance of being pregnant is an ectopic (tubal) pregnancy (see entry). Symptoms of this condition include sharp or constant one-sided pain in the lower abdomen, shoulder pain, or irregular vaginal bleeding or staining after a light or late menstrual period.

**Kidney disorders.** Lying on either side of the spine at the back of the abdominal cavity (see illustration), the kidneys can sometimes develop problems that produce pain in the abdomen. This is usually accompanied by pain in the back or flank and often fever, chills, and pain or bleeding during urination. Among the kidney disorders (see entry) that can cause abdominal pain are infections, chronic kidney failure, and kidney stones (the last are most likely to produce waves of pain).

**Bowel disorders.** Many women with lower abdominal pain, crampiness, and gas have some kind of bowel disorder, which may include constipation, irritable bowel syndrome, diverticular disease, and colon and rectal cancer (see entries), as well as ulcerative colitis, Crohn's disease, celiac disease, polyps, and arteriosclerosis of the bowel (see bowel disorders). Often bowel disorders are marked by a noticeable change in the frequency of stool or a change in consistency or ease in elimination.

**Lactose intolerance.** People who develop lower abdominal pain, cramps, diarrhea, and gassiness after they consume milk or other dairy products may have a deficiency of lactase. This enzyme normally metabolizes lactose, a sugar found in milk and other dairy products. Lactose intolerance is most easily diagnosed by observing the effects on symptoms of a lactose-free diet. Usually it is possible to control the symptoms by making a few simple dietary changes (see irritable bowel syndrome).

### ► Right upper quadrant pain

**Irritable bowel syndrome.** Sometimes this disorder of bowel function can produce pain in the upper portion of the abdomen. Just where the pain occurs depends on which part of the gut is affected (see irritable bowel syndrome).

**Liver disease.** Exposure to infectious microorganisms, alcohol, toxic chemicals, and certain medications can all lead to liver inflammation, a condition called hepatitis (see entry). Whatever the specific cause, an inflamed liver sometimes results in the gradual development of an ache deep inside the upper abdomen (see illustration). This is often accompanied by various flulike symptoms, including low-grade fever, nausea, vomiting, diarrhea, lack of appetite, muscle aches, and headache.

**Gallstones and other gallbladder disorders.** The gallbladder is a small organ that sits behind the liver and stores bile which the liver has produced. An infected or diseased

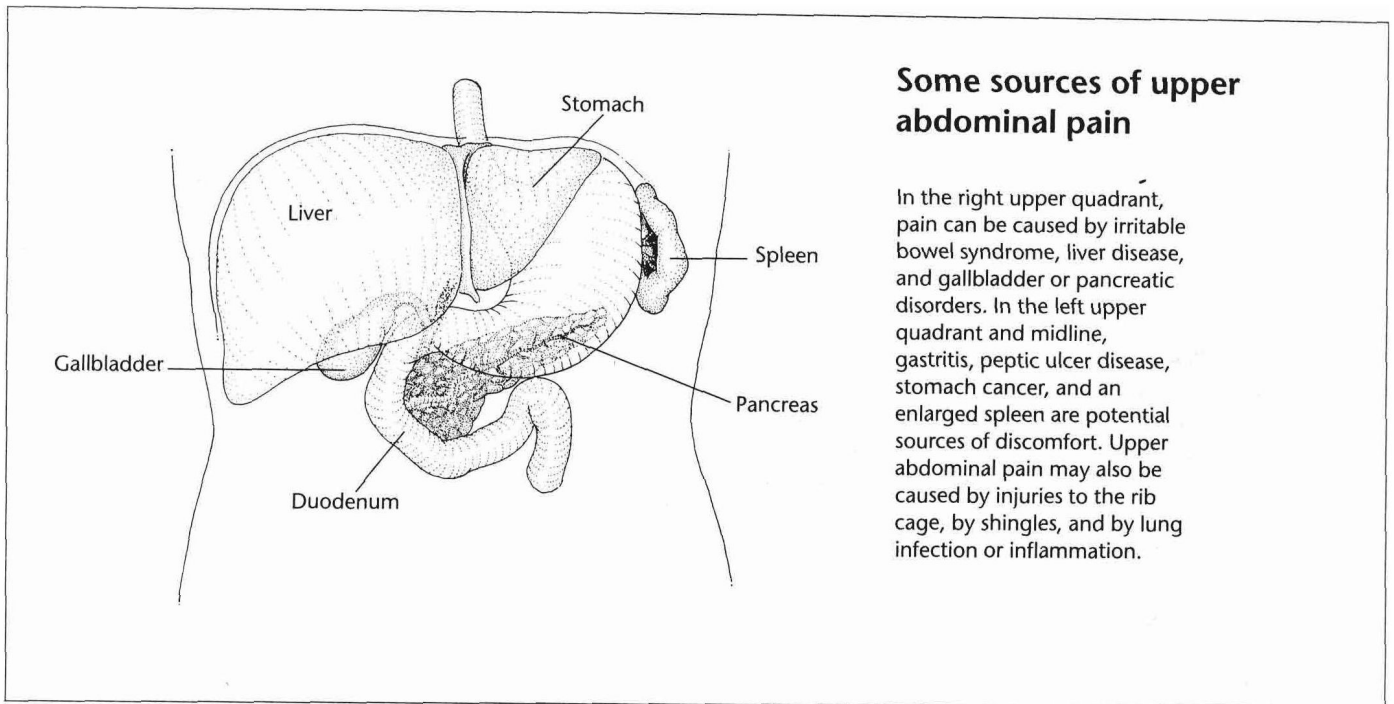
gallbladder—particularly common in middle-aged or pregnant women—very frequently causes right upper abdominal pain. Sometimes the pain, which can involve the shoulder or back as well, is caused by crystalline structures that form inside the gallbladder called gallstones (see entry). Gallbladder attacks are most common at night and after eating and, if complications have begun to develop, may include other symptoms such as high fever, chills, and jaundice (yellowing of the skin).

**Pancreatic disorders.** The pancreas is a glandular organ extending across the upper portion of the abdomen, behind the stomach (see illustration). In addition to manufacturing the hormone insulin, it also supplies enzymes that help accelerate digestion. Sometimes as a complication of gallbladder disease—or alcohol consumption, or exposure to certain drugs—the pancreas becomes inflamed, producing an extremely painful condition known as pancreatitis.

In its acute (sudden and severe) form, pancreatitis results in intense, constant, and deep-seated abdominal pain, which sometimes radiates to the back and chest and can persist unabated for hours or even days. Unlike the pain of a gallbladder attack, pain from pancreatitis usually worsens when the person is lying down and sometimes diminishes when she is sitting, standing, or leaning forward. The abdomen is tender, and there may be a low-grade fever, sweating, nausea, vomiting, rapid pulse and breathing, and skin clamminess as well. Because severe pancreatitis can be life-threatening—particularly if a cyst or abscess develops or if pancreatic fluid leaks into the abdomen—anyone with these symptoms should quickly contact a clinician.

Sometimes a chronic form of pancreatitis develops in people with a history of alcohol abuse, people who have been using certain drugs for long periods of time—including valproic acid (an anticonvulsant), azathioprine (an immunosuppressive agent), furosemide (a diuretic), and sulfasalazine (used to treat inflammatory bowel disease)—and in other people for unknown reasons. This condition involves frequent or intermittent attacks of intense abdominal pain over a number of years. Accompanying symptoms may include fever, nausea, vomiting, clammy skin, abdominal bloating, and weight loss. Eventually people with this condition may start excreting fat-containing feces—as marked by unusually bulky, foul-smelling, and buoyant stools. Chronic pancreatitis develops when the pancreas gradually loses its ability to secrete digestive enzymes. This in turn leads to malabsorption problems—which explain the weight loss and fat-containing stools, since nutrients not absorbed by the intestine are excreted in the stool. Damage to the part of the pancreas that secretes insulin can also lead to the development of diabetes.





### Some sources of upper abdominal pain

In the right upper quadrant, pain can be caused by irritable bowel syndrome, liver disease, and gallbladder or pancreatic disorders. In the left upper quadrant and midline, gastritis, peptic ulcer disease, stomach cancer, and an enlarged spleen are potential sources of discomfort. Upper abdominal pain may also be caused by injuries to the rib cage, by shingles, and by lung infection or inflammation.

A variety of dietary, drug, and surgical treatments can be used for pancreatitis, depending on the underlying cause and the extent of damage. In all cases, however, part of the treatment involves elimination of alcohol.

In rare cases advanced cancer of the pancreas may also underlie upper abdominal pain. Although more common in men than in women, pancreatic cancer remains a leading cause of death in this country, and often goes undiagnosed until it is well advanced. Frequently the first symptoms in a person with advanced pancreatic cancer are unexplained weight loss and yellowing of the skin without abdominal pain (painless jaundice).

**Pneumonia and pleurisy.** If upper abdominal pain was preceded by a respiratory infection, it may be due to inflamed or infected lungs—which occasionally can irritate the diaphragm (a muscle that separates the lungs from the abdomen) and the upper portion of the intestines. The sharp pain caused by pneumonia and pleurisy tends to be particularly noticeable after taking a deep breath (see breathing disorders).

**Rib cage pain.** If a rib in the abdominal region is fractured, a simple cough, sneeze, or movement can result in considerable pain in the upper abdomen. The result may be sharp pain that increases with every inhalation of air or when the affected area is pushed (see chest pain).

**Shingles.** This condition, which is most likely in older people or those experiencing ill health or severe stress, first produces a sensitivity or tingling in the affected nerves and then sometimes progresses to excruciating pain. The exact location of the pain depends on which nerves are affected. For this reason, shingles in the abdominal region can easily be confused with many other conditions—until several days later, when characteristic blisters erupt along the nerve path and make the condition unmistakable. Both the pain and rash of shingles (see entry) usually disappear after a few weeks, but some people continue to have pain in the affected area for many more months.

#### ► Pain in the left upper quadrant and midline

With the exception of liver or gallbladder problems, the conditions that may account for right upper quadrant pain are also possible explanations for pain in the upper left and upper midline sections of the abdomen. Below are listed several other conditions that may account for pain in these areas.

**Gastritis.** A stomachache, sometimes together with nausea or vomiting and occasionally diarrhea, can be a sign of gastritis. This usually mild and temporary condition occurs when the lining of the stomach is irritated (see peptic ulcer disease). It is the rare person who goes through life without at least some experience of gastritis. Most often the cause is