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A Case Study of Diagnosis & Treatments How is Functional Abdominal Pain Diagnosed?

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Abstract: ***Vacuum levels are commonly measured in terms of in. Hg (inches of mercury), mm Hg (Torr), and microns. We monitor motor cortical excitability, brain stimulation-induced neuroplasticity. The most common causes of abdominal pain and diarrhea are infections, such as gastroenteritis (stomach flu), and food allergies, lactose intolerance, and stress. Common bowel disorders, such as IBS and Crohn's disease, can also cause these symptoms. Viral gastroenteritis is an infection of your intestines that typically causes watery diarrhea, pain or cramping in your abdomen, nausea or vomiting, and sometimes fever. People commonly call viral gastroenteritis "stomach flu," but the term is not medically correct. Flu viruses do not cause viral gastroenteritis. The most common symptom of chronic pancreatitis is long-standing pain in the middle of your abdomen. If you have chronic pancreatitis, you might get repeated episodes of acute pancreatitis, where your pain gets worse. Your pain may get worse with eating, drinking and drinking alcohol. You may also develop jaundice.***
Keyword: food allergies, lactose intolerance, strees, infections, gastroenteritis, abdominal pain

I. INTRODUCTION

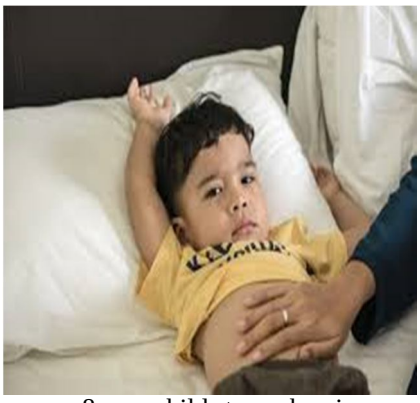
Usually, the pain is located around the umbilicus (belly button), however the pattern or location of abdominal pain is not always predictable. The pain may occur suddenly or slowly increase in severity. The pain may be constant or may increase and decrease in severity. Some children with functional abdominal pain may experience dyspepsia, or upper abdominal pain associated with nausea, vomiting, and/or a feeling of fullness after just a few bites (early satiety). Others may experience abdominal pain with bowel movements. Pain that is usually relieved by bowel movements, or associated with changes in bowel movement habits (mainly constipation, diarrhea, or constipation alternating with diarrhea) is the classic irritable bowel syndrome (IBS).

II. CAUSES

The trigger for functional abdominal pain varies from one patient to another, and may transform over time even in the same patient. The exact triggers may not be easily identified but may remain moving targets for treatment. Nerve signals or chemicals secreted by the gut or brain, may cause the gut to be more sensitive to triggers that normally do not cause significant pain (such as stretching or gas bloating). Because of this change in bowel function, this type of abdominal pain is often referred to as "functional abdominal pain."

Most young children will point to the umbilicus (belly button) when asked to describe the location of abdominal pain. However, pain centered around the belly button could be due to a number of causes that should be considered when evaluating a child with chronic abdominal pain. Some of those causes are not very serious while other causes require close and long term care. Possible causes that should be considered based on the history, physical examination and testing, are acid reflux, constipation, lactose intolerance, parasitic infections of the small and large intestines, infections of the stomach with a germ called *Helicobacter pylori* (that is associated with ulcers in the first portion of the small bowel), inflammatory bowel diseases (IBD) such as Crohn's disease and ulcerative colitis, celiac disease which is a sensitivity to cereal grains, food allergies, inflammation of the liver (hepatitis), gall bladder problems, an inflamed pancreas, an intestinal obstruction (blockage), appendicitis, and many more rare disorders. It must be emphasized that typically, none of these more severe problems cause abdominal pain in most children with chronic or recurrent bellyaches. Instead, the pain is usually "functional". A child with functional abdominal pain may also suffer from multiple, interrelated problems, such as: Heightened sensitivity to light, sound, or diet,Fatigue or sleep disorders Anxiety and depression, Headaches,Nausea, Joint pain, Muscle contractions in the intestine, Nervous system, Severe infection, Early life stress, Changes in gut microbes.

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8 year child stomach pain


25 year woman stomach pain

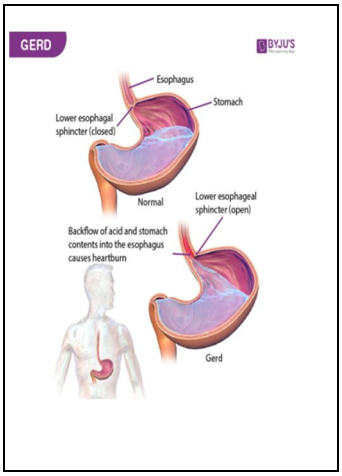

35 year woman stomach pain

A. Risk Factors

In some cases, children previously suffering from anxiety, depression and other psychiatric disorders may show an exaggerated pain response. Sometimes, the parent and the child may not be consciously aware of any stress or emotional disturbances. Other possible risk factors are thought to be physically or emotionally traumatic experiences, and preceding gastrointestinal infections. Parents and children need to be reassured that functional abdominal pain is not life threatening. However, functional abdominal pain may have negative effects on the child's physical and psychological state. The pain may interfere with school attendance, participation in sports and other extra-curricular activities. Infrequently, it may affect appetite and sleep. The changes in the daily routine may affect the child's mood and emotions, and in turn cause depression and anxiety.

B. Screening/Diagnosis

Detailed information regarding the location of abdominal pain, the frequency (number of times per week) and duration of a typical episode, and association with other complaints will in most cases provide useful clues about the cause, and will guide further testing. Other important pieces of information, known as "red flags" or "alarm signs" that a physician may inquire about include weight loss, poor growth, fever, joint pains, mouth ulcers, unusual rashes, loss of appetite, blood that appears in the vomiting or stool, and night time awakening due to diarrhea and abdominal pain. The doctor will also ask about the effects of foods and beverages upon the pain, and relationship to stools, sleep, physical activities, and emotional stress.



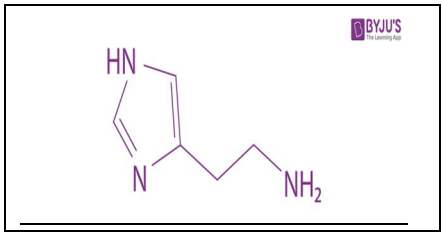
With any abdominal pain, seek urgent medical attention if children have:

- Pain so severe that they can't move without causing more pain
- Difficulty sitting sit or finding a comfortable position
- Fever
- Bloody stools
- Persistent nausea and vomiting
- Skin that appears yellow
- Severe tenderness when the abdomen is touched
- Swelling of the abdomen

Other possible causes include:

- Appendicitis
- Abdominal aortic aneurysm (bulging and weakening of the major artery in the body)
- Bowel blockage or obstruction
- Cancer of the stomach, colon (large bowel), and other organs
- Cholecystitis (inflammation of the gallbladder) with or without gallstones
- Decreased blood supply to the intestines (ischemic bowel)

- Diverticulitis (inflammation and infection of the colon)
- Endometriosis
- Heartburn, indigestion, or gastroesophageal reflux (GERD)
- Inflammatory bowel disease (Crohn disease or ulcerative colitis)
- Kidney stones
- Muscle strain
- Pancreatitis (swelling or infection of the pancreas)
- Pelvic inflammatory disease (PID)
- Ruptured ovarian cyst
- Severe menstrual cramps
- Tubal (ectopic) pregnancy
- Ulcers
- Urinary tract infections (UTI)



When to Contact a Medical Professional Get medical help right away or call your local emergency number (such as 911) if you: • Are currently being treated for cancer • Are unable to pass stool, especially if you are also vomiting • Are vomiting blood or have blood in your stool (especially if bright red, maroon or dark, tarry black) • Have chest, neck, or shoulder pain • Have sudden, sharp abdominal pain • Have pain in, or between, your shoulder blades with nausea • Have tenderness in your belly, or your belly is rigid and hard to the touch • Are pregnant or could be pregnant • Had a recent injury to your abdomen • Have difficulty breathing	Contact your provider if you have: • Abdominal discomfort that lasts 1 week or longer • Abdominal pain that does not improve in 24 to 48 hours, or becomes more severe and frequent and occurs with nausea and vomiting • Bloating that persists for more than 2 days • Burning sensation when you urinate or frequent urination • Diarrhea for more than 5 days • Fever, over 100°F (37.7°C) for adults or 100.4°F (38°C) for children, with pain • Prolonged poor appetite • Prolonged vaginal bleeding • Unexplained weight loss (spleen) An organ that is part of the lymphatic and blood systems. The spleen filters the blood to help destroy microorganisms and get rid of old or damaged red blood cells. It also makes lymphocytes (white blood cells) and stores blood cells.

III. HOW TO UNDERSTANDING MENSTRUATION CYCLE PAIN PERIOD?

Each menstruation cycle has specific days where the chances of getting pregnant are maximum. If the sperms are available to meet the mature egg released on the ovulation day, the chances of pregnancy are high. Before we go through the exact ovulation days calculations, the following are a few things to understand.

Sperms active duration: Sperms can stick in the fallopian tubes for up to several days, typically about three to six days.

Eggs active duration: The egg has only 12 to 24 hours of life.

Considering the above, technically, the fertility window is four days before ovulation, the day of ovulation, and one day after ovulation. So, technically, it's six days of the ovulation period. But the best fertile days are two days before ovulation day and the ovulation day. So, the best fertile days are the three days, two days before ovulation, and the day of ovulation. This ovulation calculator considers this principle while calculating the results.

Following are some quick examples of how to estimate the best fertility period:

For the average menstruation cycle of 28 days, the ovulation day is day 14. The best fertility period is days 12, 13, and 14.

For the average menstruation cycle of 35 days, the ovulation day is day 21. The best fertility period is days 19, 20, and 21.

For the average menstruation cycle of 21 days, the ovulation day is day 7. The best fertility period is days 5, 6, and 7.
Remember that most women have irregular periods. So, it is hard to estimate the ovulation day. To avoid the odds in these calculations and increase the chances of pregnancy, it is good to have sex every 2-3 days during your ovulation period.
Estimating the cycle length is essential to understand your ovulation days and ovulation period. This is one of the inputs asked by this ovulation calculator. As most women have irregular cycles, it is better to work out an "average" cycle length based on at least the span of three menstrual cycles. For example, your October to December cycle lengths is:
October: 30 days, November: 27 days, and December: 31 days.
Average cycle length =(30 + 27 + 31) / 3 = 29 days.

Keeping an eye on your body's behavior might be the only way out. Your body behaves a little differently when you are ovulating. You can pay attention to the following signs and know when you are ovulating:

- Your basal body temperature increases slightly, about 1/2 to 1 degree.
- Your cervical mucus or discharge may appear clearer, thinner, and slippery like raw egg whites.
- Your breast may become tender.
- Your cervix softens and opens.
- You may feel slight cramps or twinges in your lower abdomen.
- You may experience a mild spotting.
- You may experience an elevated sense of smell.
- You may experience little change in appetite or mood swings.
- Your sex drive may increase.

A cesarean section, or C-section, is surgery to deliver your baby through a cut, called an incision, made in your lower belly and uterus. You may have some pain in your belly and need pain medicine for **one to two weeks**. You can expect some vaginal bleeding for several weeks.
Abdominal or tummy pains may have a number of causes after the birth of your baby. The most common causes are after pains, UTIs (urinary tract infection - an infection of your bladder or kidneys resulting in pain when you pee) , an infection in your womb (uterus), or pain following a caesarean section.
Stool may look black or tarry. Bleeding can range from mild to severe and can be life-threatening. Imaging technology or an endoscopic investigation can usually locate the cause of the bleeding. Treatment depends on the where the bleeding is located and how severe it is.

Note: treatment for abdominal bleeding?
GI bleeding often stops on its own. If it doesn't, treatment depends on where the bleed is from. In many cases, bleeding can be treated with medicine or a procedure during a test. For example, it's sometimes possible to treat a bleeding peptic ulcer during an upper endoscopy or to remove polyps during a colonoscopy.
Can gonorrhea cause intestinal problems:
Men may notice painful urination, pain in the testicles, and/or pus-like discharge from the penis. Women may notice painful urination, vaginal discharge, or itching. Gonorrhea can also affect the rectum leading to pain with bowel movements, rectal discharge, or constipation
signs and symptoms of gonorrhea?
Possible symptoms include:

- watery, creamy, or greenish vaginal discharge.
- pain or burning while urinating.
- an urge to urinate more frequently.
- heavier periods or spotting between periods.
- pain during penetrative vaginal sex.
- sharp pain in your lower abdomen.
- itching and soreness in your anus.
- rectal bleeding or discharge.

Without treatment, syphilis bacteria can spread. This can lead to serious internal organ damage and death years after the original infection.

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Some of the symptoms of late-stage syphilis include:

- Lack of coordination or loss of feeling from nerve damage.
- Paralysis.
- Blindness.
- Dementia.
- Deafness.

If a pregnant person with syphilis passes the germs to the unborn infant, it's called congenital syphilis. This condition can be disabling or even life-threatening. So, it's important for pregnant people with syphilis to be treated. Without treatment, syphilis bacteria can spread. This can lead to serious internal organ damage and death years after the original infection.

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Syphilis Diagnosis

Your doctor will need to do a physical exam. They might give you tests including:

- Blood tests. A quick test at your doctor’s office or a public health clinic can diagnose syphilis. This is the main way syphilis is diagnosed.
- Cerebrospinal fluid tests. If your doctor thinks you might have neurosyphilis, they’ll test fluid taken from around your spinal cord.
- Darkfield microscopy. Syphilis bacteria are visible through a microscope in fluid taken from a skin sore or lymph node.

Syphilis Prevention

Don’t have intimate contact with someone if you know they’re infected.

- If you don’t know whether a sexual partner is infected, use a condom every time you have sex. Make sure you use the condom correctly. Syphilis can still spread if lesions aren't properly covered by a condom.
- Use a dental dam when you have oral sex. These are thin sheets of polyurethane used to provide a barrier between the mouth and vagina or anus.
- Don't share sex toys.
- Be in a long-term, mutually monogamous relationship with someone who doesn't have syphilis.

Conclusion

The menstrual cycle is a miraculous process of the body and is an important aspect of reproductive health. You can better manage your menstrual as well as overall health by using reliable period calculator tools to keep track of your cycle and your body’s reaction to it. Lastly, it is important to keep in mind that every woman’s cycle is unique and varies depending on their age, lifestyle, stress levels, and underlying medical conditions.



On darker skin, a syphilis rash may fade into your skin tone or be lighter in color. (Photo credit: Dr M.A. Ansary/Science Source)

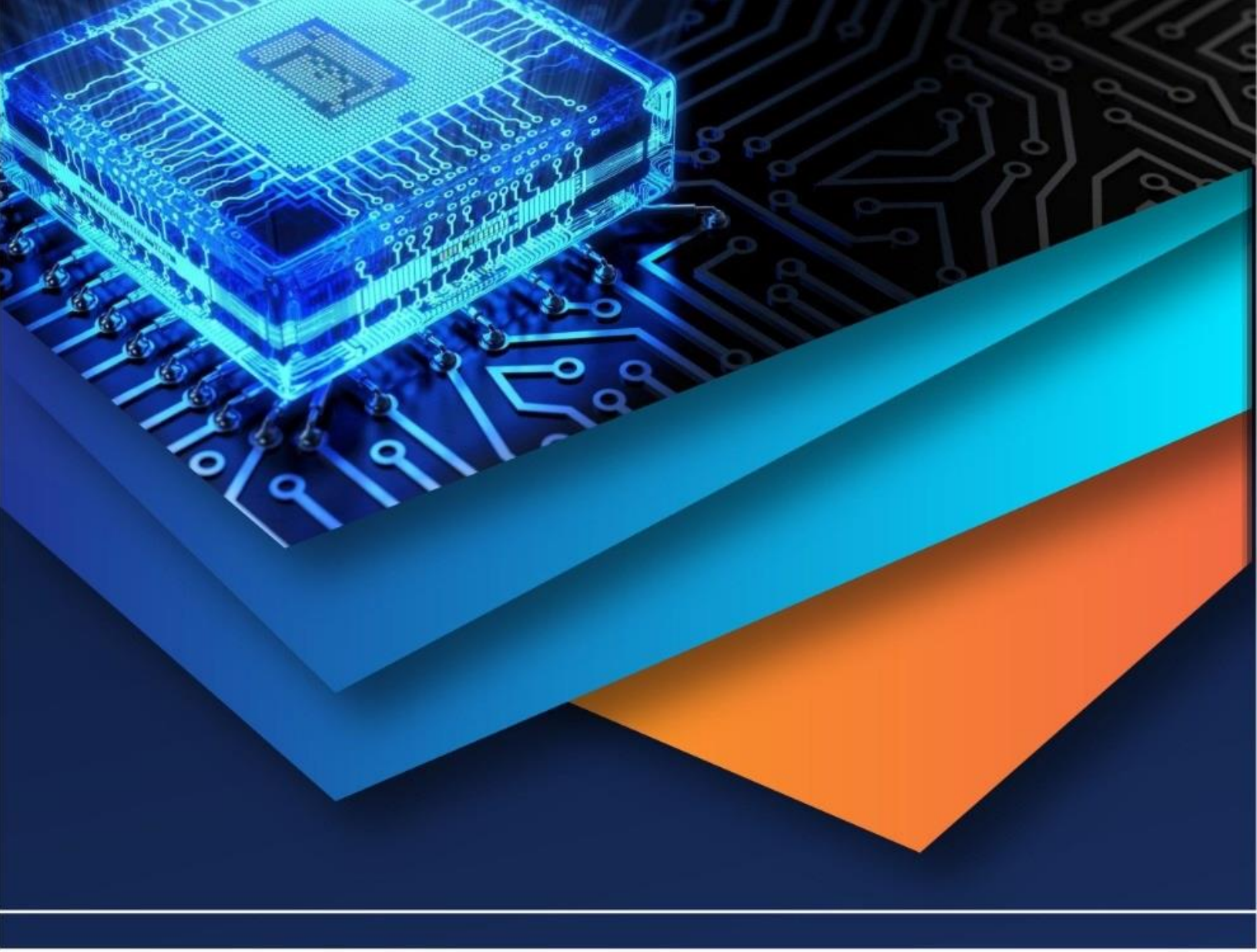
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