

# NARCOTIC BOWEL SYNDROME



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## WHAT IS NARCOTIC BOWEL SYNDROME?

The Narcotic Bowel Syndrome is a condition characterized by chronic abdominal pain in a patient who has been taking narcotics long term. Strangely, for some patients the abdominal pain worsens over time with continued use of the narcotics. Narcotic bowel syndrome is often not recognized as the cause of the patients' abdominal pain.

The abdominal pain can be constant or intermittent and is rarely localized. Other symptoms of NBS may include nausea, vomiting, bloating, constipation abdominal distention and possibly weight loss.

## HOW IS NARCOTIC BOWEL SYNDROME DIAGNOSED?

The diagnosis of NBS is based on a careful clinical history and detailed physical exam to rule out the presence of another serious disease. Laboratory tests, including blood tests, are usually normal. However, abdominal x-rays may reveal a large amount of stool and findings suggestive of partial abdominal obstruction (i.e., a blockage). This is called an ileus and is actually due to a loss of functioning of the muscles in the intestine rather than an actual obstruction

Diagnosis of the Narcotic Bowel Syndrome may be suspected when chronic or worsening abdominal pain, together with other symptoms, is related to escalating dosages of narcotics that are no longer helpful in controlling symptoms.

### **Diagnostic Criteria for Narcotic Bowel Syndrome (1)**

Chronic or frequently recurring abdominal pain that is treated with acute high-dose or chronic narcotics and all of the following:

- The pain worsens or incompletely resolves with continued or escalating dosages of narcotics
- There is marked worsening of pain when the narcotic dose wanes and improvement when narcotics are re-instituted (soar and crash)
- There is a progression of the frequency, duration, and intensity of pain episodes
- The nature and intensity of the pain is not explained by a current or previous GI diagnosis\*

\*A patient may have a structural diagnosis (eg, inflammatory bowel disease, chronic pancreatitis), but the character or activity of the disease process is not sufficient to explain the pain.

This condition can develop in people who are initially prescribed narcotics for managing short term, acute pain (e.g. after surgery or trauma). Although helpful initially, over time, the pain relief from the use of the narcotics is temporary and less effective, necessitating the use of increased dosages to relieve the pain. People with Functional GI Disorders (IBS, etc.) who are treated with narcotics are at an even higher risk of developing NBS because of their GI sensitivity and the fact that they already suffer from chronic pain.

## HOW DO NARCOTICS AFFECT MY GI TRACT?

It is well known that narcotics act directly on the GI tract, although the mechanism is not fully understood. Two major effects on the GI tract that are recognized are delayed motility and altered pain sensation.

The first major effect is abnormal motility. Narcotics delay stomach emptying and slow down the motility of the small intestine and colon. This may result in problems with constipation and less water in the stool, which means the stool is hard and difficult to pass.

The second major effect is altered pain sensitivity. Use of narcotics can increase the pain perception and sensitivity in the GI tract. Also specific regions of the brain, when irritated by long term narcotic use, may stop working properly. In addition, special cells which are located around the nerves in the spinal cord may react as though there is active inflammation. Research has proven while brief use of higher dosages of narcotics can cause pain relief, chronic use can cause increased pain sensation making pain worse. Narcotics are used to treat pain but with very high doses, in some cases, Narcotic Bowel Syndrome can occur.

In summary, the result of chronic narcotic use can be abdominal pain, constipation, vomiting, nausea, distension and discomfort. These symptoms can be especially troublesome for patients with Functional GI Disorders.

## HOW IS NARCOTIC BOWEL SYNDROME TREATED?

The treatment usually begins with adding a new medication to help manage abdominal pain prior to narcotic withdrawal. The medicines that are most commonly used are antidepressants. These are used in much lower doses than to treat depression. Antidepressants are successfully used in treatment of chronic abdominal pain in general. After a period of therapy with antidepressants, gradual withdrawal of narcotics is started. Other medications, which help to manage withdrawal effects, are also begun. These short term medications may include Clonidine which blocks some of the withdrawal effects and anti-anxiety drugs. The most common withdrawal effects are crampy abdominal pain, anxiety, restlessness, nausea, vomiting, diarrhea and aching of the muscles.

Some patients also benefit from talking to a psychologist. Your doctor can help you go through the withdrawal and will continue to work with you in your care. Frequent follow up visits after narcotic withdrawal should be arranged. Despite the possibility of discomfort during the withdrawal period, importantly, once off the narcotics, most patients feel better and narcotics are no longer needed.

### References:

1. Grunkemeier, D.M.S., Cassara, J.E., Dalton, C.B., Drossman, D.A.: The Narcotic Bowel Syndrome: Clinical Features, Pathophysiology and Management. *Clinical Gastroenterology and Hepatology* 2007, 5, 1126 - 1139.

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