

LOPERAMIDE (Oral-Local)

Indications

Diarrhea (treatment)¼Loperamide is indicated in adults for the control and symptomatic relief of acute nonspecific diarrhea 36, 45, 46 and of chronic diarrhea associated with inflammatory bowel disease 45, 46.

Loperamide is also indicated to reduce the volume of discharge from ileostomies, 1, 14, 20, 22, 25, 29, 30, 45 colostomies, and other intestinal resections. 5, 45, 46

[Loperamide may be used in children to treat diarrhea caused by rapid transit when the anatomy of the bowel has been altered by disease or by surgical procedures.] * 28, 40, 41

Traveler's diarrhea (treatment)¼Loperamide is indicated for symptomatic relief of secretory diarrhea produced by bacteria, viruses, and parasites. 10, 13, 31

Mechanism of action/Effect:

Loperamide acts on receptors along the small intestine to decrease circular and longitudinal muscle activity. 43, 44 Loperamide exerts its antidiarrheal action by slowing intestinal transit and increasing contact time, and perhaps also by directly inhibiting fluid and electrolyte secretion and/or stimulating salt and water absorption. 4, 6, 12, 13, 14, 15, 18, 23, 25, 29, 30, 43

Precautions to Consider

Carcinogenicity

Carcinogenic potential was not documented in a study using rats administered doses up to 133 times the maximum human dose. 1, 14, 25, 29, 30

Pregnancy/Reproduction

Fertility¼Reproduction studies in rats and rabbits have shown that loperamide administered in doses up to 30 times the human therapeutic dose does not interfere with fertility. 5

Pregnancy¼Adequate and well-controlled studies have not been done in humans. 25, 29, 30

Reproduction studies in rats and rabbits have shown that loperamide administered in doses up to 30 times the human therapeutic dose did not cause harm to the offspring, 5, 36 or produce teratogenic effects. Higher doses, however, impaired maternal and neonate survival. 1, 25, 29, 30, 36

FDA Pregnancy Category B. 14, 29, 30

Breast-feeding

It is not known whether loperamide is distributed into breast milk. 14, 25, 29, 30 However, in a pre- and post-natal study, loperamide administered to female nursing rats at a dose of 40 mg per kg of body weight caused a decrease in pup survival. 1, 2

Pediatrics

Loperamide is not recommended for use in children up to 6 years of age 4, 5, 25, 29, 30 unless directed by a physician, 34 or for routine use or as initial therapy in children older than 6 years of age. 28

Oral rehydration therapy is the preferred treatment for children with diarrhea 10, 13, 16, 26, 33 because loperamide may mask dehydration and depletion of electrolytes. Dehydration may further increase the variability in the response to loperamide. 1, 3, 12, 14, 19, 21

Children, especially those under 3 years of age, are more susceptible to the opiate-like effects (CNS effects) of loperamide. 1

Geriatrics

In geriatric patients with diarrhea, caution is recommended because loperamide may mask dehydration and depletion of electrolytes. 10, 13 Dehydration may further increase the variability in the response to loperamide. 1

Drug interactions and/or related problems

The following drug interactions and/or related problems have been selected on the basis of their potential clinical significance (possible mechanism in parentheses where appropriate)¼not necessarily inclusive (>> = major clinical significance):

>> Opioid (narcotic) analgesics

(concurrent use of loperamide with an opioid analgesic may increase the risk of severe constipation)

Medical considerations/Contraindications

The medical considerations/contraindications included have been selected on the basis of their potential clinical significance (reasons given in parentheses where appropriate)¼ not necessarily inclusive (>> = major clinical significance).

Except under special circumstances, this medication should not be used when the following medical problems exist

>> Colitis, severe

(patient may develop toxic megacolon 1, 5, 13, 14, 25, 29, 30)

>> Diarrhea associated with *Clostridium difficile* resulting from treatment with broad-spectrum antibiotics

(loperamide may prolong transit time, causing a delay in the removal of toxins from the colon, thereby prolonging and/or worsening the diarrhea 1, 5, 13, 14, 25, 29, 30)

>> Dysentery, acute, characterized by bloody stools and elevated temperature

(sole treatment with loperamide may be inadequate; antibiotic therapy may be required 1, 5, 10, 12, 14, 18, 25, 29)

>> Previous allergic reaction to loperamide 1, 5, 14, 25, 29, 30, 31, 37

Risk-benefit should be considered when the following medical problems exist

>> Dehydration

(rehydration therapy is essential if signs or symptoms of dehydration, such as dryness of mouth, excessive thirst, wrinkled skin, decreased urination, and dizziness or lightheadedness, are present; fluid loss may have serious consequences, such as circulatory collapse and renal failure, especially in young children 1, 18)

Diarrhea caused by infectious organisms

(bacterial diarrhea may, on rare occasions, worsen due to the increased contact time between the mucosa and the penetrating microorganism; however, there is no evidence of this occurring in actual practice 1, 6, 12)

Hepatic function impairment 4, 36

(loperamide undergoes extensive first pass metabolism in the liver; therefore, patients with hepatic function impairment may have an increased risk of developing CNS toxicity 1, 5, 12, 14, 25, 29, 30, 31)

Side/Adverse Effects

Note: Adverse effects may be difficult to distinguish from the diarrheal syndrome itself and are usually self-limited. 5, 14, 17, 25, 29, 30

The following side/adverse effects have been selected on the basis of their potential clinical significance (possible signs and symptoms in parentheses where appropriate) ¾ not necessarily inclusive:
Those indicating need for medical attention