

Utilizing Low Dose Naltrexone to Treat Abdominal Pain in a Patient with Sclerosing Mesenteritis: A Case Report

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BACKGROUND

Sclerosing Mesenteritis (SM):

- rare, poorly understood inflammatory condition that causes chronic uncontrolled fibrosis of mesentery [1]
- often associated with autoimmune disease, malignancy, or prior abdominal surgery [1]
- Commonly presents with abdominal pain, bloating, weight loss, and altered bowel habits. [2]
- Diagnosis is difficult due to overlap with other gastrointestinal disorders

Naltrexone and Low Dose Naltrexone (LDN):

- opioid receptor antagonist traditionally used in doses of 50–100 mg daily to treat opioid and alcohol dependence [3]
- at low doses (1–5 mg) it exhibits paradoxical analgesic and anti-inflammatory effects [3]

CASE DESCRIPTION

Chief Complaint

- 41-year-old male with history of shellfish allergy presented with right upper and left lower quadrant abdominal pain of four months' duration associated with alternating diarrhea and constipation, worsened by eating

Prior Treatments:

- Conservative: PT and manual manipulations
- Pharmacologic: minimal relief on acetaminophen, gabapentin, and nortriptyline. Previously failed ibuprofen, cyclobenzaprine, methocarbamol, and opioids

Intervention:

- At initial consultation, LDN was started, methocarbamol was re-trialed, and transversus abdominis plane block was recommended

Result

- Significant improvement in abdominal pain on LDN monotherapy without side effects
- methocarbamol was never initiated and TAP block was canceled by the patient
- Patient discontinued all other pain medications at 5-month follow up

FIGURES/TABLES

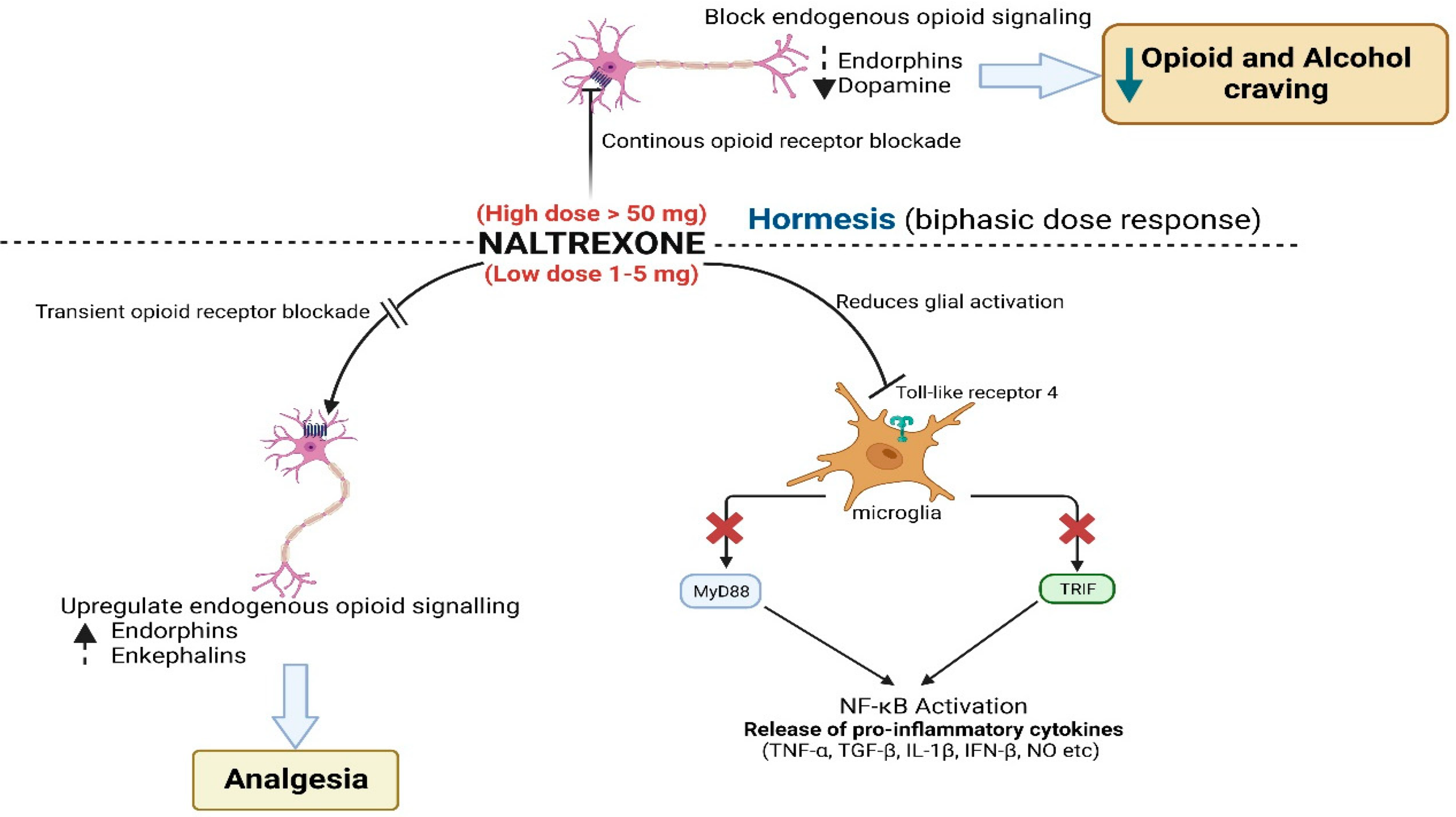


Figure 1. Illustration depicting the mechanism of action of both high-dose and low-dose naltrexone^[7]

DISCUSSION

- LDN primarily inhibits Toll-like receptor 4 (TLR4), reducing pro-inflammatory mediators such as TNF- α , IL-1, and substance P, while upregulating opioid growth factor pathways [6]
- These mechanisms have been studied in the management of inflammatory and pain syndromes including fibromyalgia, CRPS, multiple sclerosis, and Crohn's disease [3,5]
- LDN's favorable side effect profile, characterized mainly by vivid dreams, along with its minimal risk of tolerance or dependence makes it an attractive option for chronic pain management [5]
- To our knowledge, limited literature exists on the use of LDN for sclerosing mesenteritis. One open-label pilot study of three patients with mesenteric panniculitis, a related condition, found that LDN at 4.5 mg nightly resulted in symptomatic improvement in two of the three patients [4]

DISCUSSION (cont.)

- As our case demonstrates, adding LDN to this patient's pain regimen both reduced the risk of polypharmacy and offered safer and more effective monotherapy
- Further research including larger, controlled studies involving LDN for patients with SM and other gastrointestinal disorders would serve to validate its role in multimodal pain regimens
- Such efforts may incentivize the standardization of care to include this medication as a viable option for treating inflammatory GI conditions

CONCLUSION

Low-dose naltrexone has shown promise as a treatment for a variety of inflammatory disorders and should be strongly considered for larger-scale investigations, which may directly promote improvements in pain, quality of life, and patient outcomes.

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