

# Opana<sup>®</sup> ER induced thrombotic thrombocytopenic purpura

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**Abstract:** We present the case of a patient who developed thrombotic thrombocytopenic purpura (TTP) following intravenous injection of Opana<sup>®</sup> ER. TTP reemerged after three months of abstinence with Opana misuse. This case report brings awareness to the possibility of developing TTP in those who misuse Opana, which is a growing concern.

**Keywords:** opioid abuse, opioid dependence, TTP, Opana

## Case report

We present the case of a patient who dissolved the tablets and then injected intravenously oxymorphone extended release tablets (Opana<sup>®</sup> ER; Endo Pharmaceuticals Inc., Malvern, PA, USA) and developed unexplained thrombotic thrombocytopenic purpura (TTP). The patient was a 30-year-old, single, Caucasian man who presented for opioid dependence to a substance use disorders inpatient rehabilitation program. Prior to admission, he was hospitalized for TTP-like illness after injecting Opana. The patient reported that his opiate dependence evolved over time, finding that injecting Opana became his only method of use, injecting a 20 mg tablet of Opana every 8 hours. Following discharge from the rehabilitation program, he maintained abstinence for 3 months. He then relapsed and started to misuse Opana and redeveloped TTP.

For both admissions for TTP, the patient presented complaining of feeling sick, tired, confused, and had difficulty breathing. Upon admission, he was found to have a mild fever and generalized purpura without mucosal involvement. His comprehensive metabolic panel was within normal limits except for a platelet count of 30,000 per  $\mu\text{L}$ . His LDH was mildly above the normal range. His medical workup, including infection panel, was negative. His Coombs test was negative. A chest X-ray was unremarkable, and electrocardiogram (EKG) sinus tachycardia was 120 bpm. For both admissions, his treatment was uneventful and consisted of 3 days of glucocorticoids (prednisone). Once admitted to inpatient rehabilitation, he was offered plasmapheresis, but he declined. His platelets continued to trend upward throughout his rehabilitation admission, but he left prior to completing the program.

Opana is one of the trade names of oxymorphone, a semi-synthetic opioid used to treat moderate to severe chronic pain.<sup>1</sup> TTP is a rare blood coagulation disorder that causes microscopic clots to form in small blood vessels throughout the body that is typically associated with an infectious or inflammatory process, yet it is only seen in approximately one in 100,000 people.<sup>1</sup> A case controlled study found 15 cases of TTP-like illness associated with intravenous Opana ER abuse in Tennessee.<sup>2</sup>

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Our case is the only example, to our knowledge, where TTP reemerged following a re-challenge with IV oral Opana. Using IV oral Opana is a growing concern. On a Google search, there were 119,000 results for “Opana ER IV”, including tutorials on how to prepare Opana tablets as an injectable, suggesting that its misuse is significant. This case report and others suggest that health care professionals should be aware of the possibility of developing TTP in those who misuse Opana.

## Disclosure

The authors report no conflicts of interest in this work.

## References

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