

## The comparison of intravenous acetaminophen to intravenous morphine in treatment of acute pain caused by renal colic

Seyyed Hosein Montazer<sup>1</sup>, Hamed Aminiahidashti<sup>2</sup>, Seyed Mohammad Hosseini Nejad<sup>3</sup>, Farzad Bozorgi<sup>4</sup>, Fatemeh Jahanian<sup>5</sup>, Hasan Motamed<sup>6</sup>

1 -Emergency Department- Imam Khomeini Hospital -Sari- Mazandaran U niversity of Medical Sciences, hmontazer66@yahoo.com,

2-Emergency Department- Imam Khomeini Hospital -Sari- Mazandaran U niversity of Medical Sciences, hamedaminiahidashti@yahoo.com,

3-Emergency Department- Imam Khomeini Hospital -Sari- Mazandaran U niversity of Medical Sciences, drhoseininejad@yahoo.com,

4-Emergency Department- Imam Khomeini Hospital -Sari- Mazandaran U niversity of Medical Sciences, farzad722001@yahoo.com,

5-Emergency Department- Imam Khomeini Hospital -Sari- Mazandaran U niversity of Medical Sciences, autumnalroja@yahoo.com,

6-Emergency Department- Imam Khomeini Hospital -Sari- Mazandaran U niversity of Medical Sciences, hasan\_motamed@yahoo.com

**Introduction:** Kidney stones are of the most prevalent urological diseases suffered by nearly 2-3 percent of the people. The main purpose in treatment of renal colic is reduction of the frequent analgesic doses besides pain relief.

**Methods and Materials:** This is a clinical double blind trial performed on the patients visiting the tertiary referral center of the emergency department of Imam Khomeini hospital, 393 patients participated the study with the diagnosis of the acute pain caused by kidney stone renal colic. The patient divided to two groups. The first group was treated with morphine and the second group was treated with acetaminophen. The pain intensity was assessed and recorded before injection with visual analog scale device (VAS) in 15, 30, 60, 120 minutes.

**Results:** There was no significant difference in the pain intensity of the group under study before and 15 and 30 minutes after the infusion, but the pain average in the group given morphine 60 and 120 minutes after the infusion was significantly less than the group given intravenous acetaminophen.

**Conclusion:** The pain intensity based on (VAS) in the patients with renal colic treated by intravenous acetaminophen and intravenous morphine was not significantly different in 1 hour after the treatment.

**Keywords:** Renal colic| Morphine| Acetaminophen

