

# Comparing Oral Controlled-Release Morphine and Continuous Subcutaneous Infusion Systems

Yota Kawamura\*

Laboratory of Environmental Medicine and Developmental Toxicology, Shantou University Medical College, Guang dong, Egypt

**Keywords:** Morphine, Controlled-Release, Oral, Subcutaneous Infusion, Comparison

**Abstract:** This review compares the efficacy and safety of oral controlled-release morphine and continuous subcutaneous infusion systems. The oral system offers convenience but may have lower bioavailability, while the subcutaneous system provides more stable plasma levels but requires more frequent dosing.

The oral controlled-release morphine system is designed to provide a steady state of morphine in the blood over a 24-hour period. This is achieved through the use of a matrix or coating that controls the rate of drug release. The subcutaneous infusion system, on the other hand, involves the continuous administration of morphine into the subcutaneous space through a catheter. This system allows for a more direct and consistent delivery of the drug, bypassing the first-pass effect of the liver.

## Oral Controlled-Release Morphine

Oral controlled-release morphine formulations are available in various forms, including tablets and capsules. These formulations are designed to provide a steady state of morphine in the blood over a 24-hour period. The subcutaneous infusion system, on the other hand, involves the continuous administration of morphine into the subcutaneous space through a catheter. This system allows for a more direct and consistent delivery of the drug, bypassing the first-pass effect of the liver.

The subcutaneous infusion system is particularly useful for patients who are unable to take oral medication or who require a more precise and consistent delivery of morphine. However, it is important to note that the subcutaneous system may have a higher risk of infection and requires more frequent dosing compared to the oral system. The choice between the two systems should be based on the individual patient's needs and clinical circumstances.

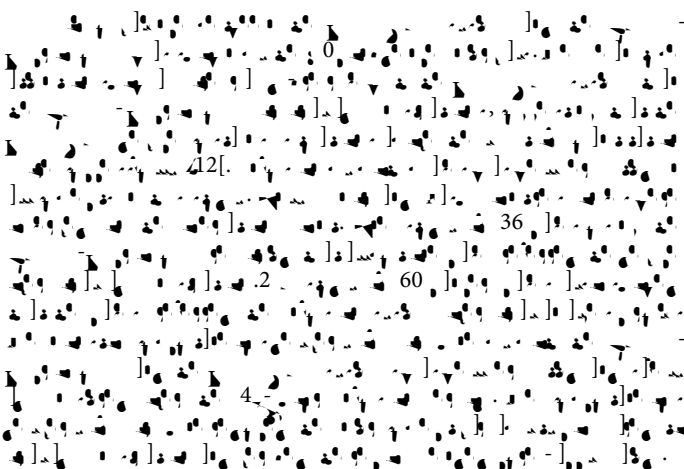
**\*Corresponding author:** Yota Kawamura, Laboratory of Environmental Medicine and Developmental Toxicology, Shantou University Medical College, Guangdong, Egypt, E-mail: kawayot@yahoo.com

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