

Prevalence of False Negative Results for Hydrocodone in Oral Fluid Toxicology Compared with Urine Toxicology

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Introduction

- This study aimed to compare the efficacy and reliability between oral fluid and urine studies in hydrocodone drug monitoring programs.

Methods

- 14 patients taking hydrocodone randomly selected from a Chronic Pain Center. PMP reports were reviewed prior.
- Oral fluid and urine sample results from April to October 2021 were analyzed for each patient.
- Hydrocodone levels were measured using enzyme-linked immunoassay (ELISA) and liquid chromatography–mass spectrometry (LC/MS).
- Test results were compared to each other to determine sensitivities of each test type.

Results

Sensitivity for Detecting Hydrocodone		
	Oral Fluid	Urine
ELISA	71.4%	100%
LC/MS	85.7%	100%

Discussion

1. Oral fluid toxicology may result in more false negative results when compared to urine studies.
2. LC/MS could be a more reliable modality in oral fluid testing when compared with ELISA.

Oral Fluid Toxicology for Hydrocodone May Result in More False Negative Results when Compared with Urine Toxicology.

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More Information

- Oral fluid studies emerged as a popular and cost-effective option during the COVID-19 pandemic.
- PMP reports did not reveal any aberrant drug taking behavior in any of the patients.
- Liquid Chromatography (LC/MS) has major barriers in currently being more expensive and less readily available in laboratory testing centers.

References

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