

Accumulation of EPN in Adipose Tissue Following Oral Ingestion

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Abstract

Introduction: We present here an autopsy case involving ingestion of ethyl *p*-nitrophenyl phenylphosphonothionate (EPN), an organophosphate pesticide.

Objectives: To examine whether adipose tissue is useful for identification of lipophilic chemicals.

Results: Toxicological analysis using liquid chromatography tandem mass spectrometry quantified EPN at concentrations of 75 ng/ml in femoral venous blood and an extremely high 51,155 ng/g in adipose tissue.

Conclusion: We concluded that the cause of death was respiratory insufficiency due to EPN poisoning. As EPN accumulates in adipose tissue, this tissue may be useful for identification of EPN at long intervals after ingestion.

Keywords: adipose tissue EPN; insecticide; poisoning;

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