

Pharmacology of marijuana and its transfer into human milk

Prof Thomas W. Hale

Texas Tech University School of Medicine, Amarillo, Texas, USA

The transfer of various components from marijuana into human milk have been poorly reported in the past, leaving us with limited knowledge to advise mothers as to the risk to their infant from ingesting marijuana products. Recent changes in the active content in marijuana have shown a massive increase in the content of Delta-9-THC from 3% 20 years ago to 23% today. New pharmacokinetic studies are required to determine what the actual risks of exposure to marijuana may be. This lecture will describe in some detail the types of exposure (oral, inhaled, and transcutaneous), the relative bioavailability of THC in various exposures, the active and inactive metabolites following marijuana exposure, the metabolism, and rates of excretion of Delta-9-THC. This lecture will also include new data on the dose of Delta-9-THC found in human milk following a carefully designed study in breastfeeding mothers consuming marijuana. This lecture will compare the phytocannabinoid Cannabis Sativa to the endocannabinoid system naturally found in humans and describe some new evidence from our laboratories on the endocannabinoids present in human milk.