

VOODOO, A DOG, AND AMPLIFYING TRACE EVIDENCE, A CASE STUDY

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A break in occurred at a home in a rural area of Louisiana. The home was robbed and vandalized. The family dog was killed with evidence of voodoo being left at the site. Received, as evidentiary items retrieved from the scene, were a broken kitchen knife, several straight pins removed from the dog's torso and eyes, and the dog's collar. Also submitted was a known buccal swab from the suspect. The kitchen knife was left at the crime scene and was suspected of being used to stab the dog to death. Investigators believed the knife to come from the home of the suspect and his mother. The knife had been cleaned and was broken at the rivets.

Swabs were taken from the handle of the knife, the blade of the knife and the end of the handle of the knife. The pins were also swabbed, as was the dog's collar. DNA was then extracted using a standard proteinase K extraction. In this case the samples were amplified for canine STRs, mtDNA as well as human STR analysis. The canine DNA was extremely limited due to the knife being cleaned so STR analysis was impossible on the samples taken from the knife. Quantitation of the knife blade extraction showed low yields impossible to amplify because of volume constraints. As a result, the sample was then dried, rehydrated and amplified using an increased Mg concentration. This sample was then sequenced using an ABI 377 Sequencer and the Big Dye Terminator Kit by Perkin Elmer. Upon rehydration and amplification, the sample did yield testable canine mtDNA consistent with the knowns obtained from the collar and the pins removed from the dog. The handle of the knife yielded a human mixed sample with male and female contributors. The suspect could not be excluded from this mixture. The end of the knife yielded a single profile that was consistent with the suspect.