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Development of a Rapid Method to Determine Benzoylecgonine in Urine

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DEVELOPMENT OF A RAPID METHOD TO DETERMINE
BENZOYLECGONINE IN URINE

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This study has involved the development of a more inexpensive way to screen a large number of samples rapidly for benzoylecgonine, (BE) the body's main metabolite of cocaine, in urine. This method incorporates the use of the ion pairing reagent, tetraiodobismuthate or BiI_4^- , to aid in the extraction of BE from urine into methylene chloride. This extract is then injected into the HPLC for quantification. Figure 1 shows the hydrolysis of cocaine to its metabolite, benzoyl ecgonine.

FIGURE 1. The Hydrolysis of Cocaine

