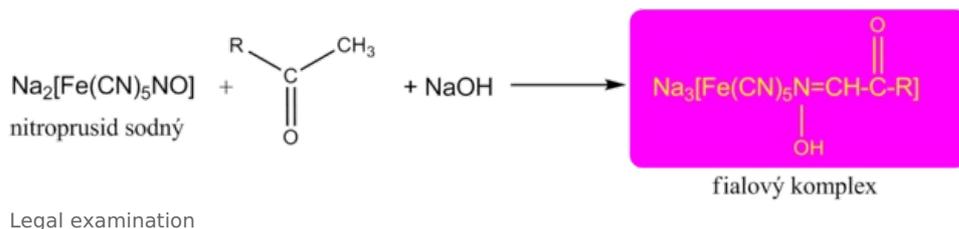


Urinary ketone bodies/determination

The detection of ketone bodies is based on the reactions of acetoacetic acid and acetone with sodium nitroprusside in an alkaline medium, which forms a red-violet-colored complex. This principle is used by Legal's and Lestradet's exams, as well as diagnostic strips. B-hydroxybutyric acid (ie the most abundant ketone substance) does not provide a reaction and therefore a negative result does not completely rule out ketoacidosis.

Compounds with free sulfhydryl groups (eg the antihypertensive captopril or uroprotectant used in some mesna chemotherapeutic regimens) provide **false positivity for urinary ketone bodies**. Quite often, bacterial products in urinary tract infections also provide a similar response.



False negatives, apart from the already mentioned insensitivity of the β -hydroxybutyric acid tests, are not significant.

Odkazy

Reference

Kategorie:Vložené články Kategorie:Biochemie Kategorie:Klinická biochemie