Spectrophotometric Analysis of Cabergoline in Pharmaceutical Preparations

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SUMMARY. **Cabergoline (CAB) is a synthetic ergoline dopamine agonist with high affinity to D_2 receptors, thus used for the treatment of Parkinson's patients and hyperprolactinemia disorders. In this study, simple, fast, reliable and validated UV-VIS and 2nd order derivative spectrophotometric methods for determination of CAB in pharmaceutical preparations were developed without any previous sample preparation step. Determination of CAB was performed at 280 nm wavelength by UV-VIS spectrophotometry and in the range of 227-232 nm by 2nd order derivative spectrophotometry. Developed both spectrophotometric methods were linear over the range of CAB concentrations from 1 to 125 μg mL^{-1}. The highest relative error and relative standard deviation in within-day and day-to-day study for UV-VIS spectrophotometry were found to be 1.10 % and 0.63 %, respectively. The relative error and relative standard deviation in within-day and day-to-day study for 2nd order derivative spectrophotometry were not higher than 1.10 % and 0.70 %, respectively.**