

P30. FAST DETECTION OF ACETYLSALICYLIC ACID BY LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY(LC-MSMS)

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Objectives

Acetylsalicylic acid (ASA) is the most widely used as an analgesic, anti-inflammatory and antipyretic drug, and also used to inhibit cyclooxygenase dependent platelet aggregation. The aim of this study was to develop a simple, fast and accurate tandem mass method for determination and quantification of ASA.

Methods

Chromatographic separation was performed using an Shimadzu LC-20-AD (Kyoto, Japan) coupled with a ABSCIEX API 3200 triple quadrupole massspectrometer(USA) equipped with an electrospray ion source (ESI) operating in negative mode.

Results

Intraassay CV values for acetylsalicylic acid were 8% and 6% for 0.8 and 100 µg/L, respectively.

Discussion

The narrow therapeutic range of these drugs are of importance to be analyzed at critical concentrations. This method has capability to determine these levels.

Conclusion

We can conclude that the developed method can be useful for clinical studies and routine therapeutic drug monitoring with the desired precision and accuracy.

Keywords

Salicylic toxicity, tandem mass, high performance, chromatography.

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