عنوان مقاله:

In-Vitro Comparative Quality Evaluation of Paracetamol Tablets Marketed in Iraq

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خلاصه مقاله:

One of the crucial responsibilities of pharmacists is to provide Iraqi people with safe and effective medicines. Quality control tests have been performed to ensure that these medicines could meet acceptable standards of quality, efficacy, and safety. Paracetamol is an analgesic medication that is used very frequently; thus, this study aimed to quality evaluate different brands of paracetamol ۵۰۰ mg tablets marketed in Iraq, four brands of paracetamol tablets were used in the study obtained from private pharmacies. Method: The selected paracetamol tablets were evaluated using standardized quality tests such as: weight variation, drug. Content uniformity, tablets hardness test, tablets friability, disintegration test, and dissolution test. Results: The tablets were assessed to check if they conform with the specifications of United States Pharmacopeia (USP). From the analysis of the results, it was observed that the weight variation showed an acceptable range. drug content in all selected paracetamol tablets was found between۹۶.۸%-۱۰۱.۲%; it was within the specified ۸۵%-۱۱۵% standard range. Friability tests showed that all selected tablets were within USP's ۱% mass loss limits. Doliprane and Neomol showed comparatively acceptable limits of hardness. All tablets disintegrated were within a time limit of less than ۱۵ minutes. Additionally, an in vitro release study of the drug in ۰.۱ N HCl (pH ۱.۲) and phosphate buffer (Ph ۶.۸) exceeded ۹۰% after ۷۵ min. The FT-IR study showed that the main characteristic bands of FT-IR spectra for the active ingredient (paracetamol) were found in all-selected tablets and the FT- IR spectra of pure drug. This study concluded that all selected Paracetamol tablets were met .pharmacopeial standards

کلمات کلیدی: