

Determinatin of Ofloxacin in Human Serum by Reversed-Phase HPLC

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A sensitive and rapid method for the determination of ofloxacin in serum was developed. High performance liquid chromatograph (Waters, USA) with a variable wavelength fluorospectrophotometric detector (Shimadzu RF-530, Japan) and reversed-phase C₁₈ Hypersil column (100 mm × 4.6 mm) were used. The mobile phase of 0.05 mol/L citric acid-0.5 mol/L ammonium acetate-acetonitrile-1% phosphoric acid-diethylamine (75 : 1 : 22 : 2 : 0.15) was pumped at 1.0 ml/min through the column. The retention time for ofloxacin was 4.8 min. The serum samples were deproteinized by adding acetonitrile. After centrifugation a 20 μl portion of the supernatant was directly chromatographed by using a RP-HPLC system. Standard curve was linear over the concentration range of 40~6000 ng/ml, and the detective limit in serum was 25 ng/ml. The recovery of proposed method was more than 98% and the absolute recovery more than 89%. The within-day RSD ranged from 2.0% to 4.0% and the between-day RSD from 2.2% to 4.5%.

Key words Ofloxacin; HPLC; Content determination

【文摘 003】角质层及其类脂对 5-氟脲嘧啶经皮渗透的作用 平其能, 孙国庆, 刘国杰. 药学报, 1993, 28(12): 924

采用离体皮肤扩散等技术研究了 5-氟脲嘧啶(5-Fu)在人皮肤各层次中的渗透性质和 1,8-桉油精(1,8-CN)对药物渗透及皮肤热转变的影响。实验表明 5-Fu 在皮肤各层次中有相近分配系数, 但扩散性质不同。角质层、全皮层、脱脂角质层和去角质层全皮扩散系数依次为 1.32×10^{-7} , 1.01×10^{-7} , 1.37×10^{-6} 和 $54.09 \times 10^{-6} \text{ cm}^2/\text{h}$ 。用 1,8-CN 处理上述皮肤样品 12 h 后, 5-Fu 在各组织的分配均减少, 角质层和全皮的通透性显著增加 ($P < 0.05$), 对去脂角质层和去角质层全皮的通透性无明显影响。结合 DSC 分析证明, 角质层是 5-Fu 经皮渗透的重要屏障, 类

脂对 5-Fu 的扩散和 1,8-CN 的增效具有重要意义。

【文摘 004】数种中药对迟发型变态反应的影响

徐强, 赵红, 王蓉. 中药药理与临床, 1993, 9(4): 30

观察了苦参、地肤子、赤芍和鸡血藤对迟发型变态反应(DTH)的影响。结果发现, 在抗原致敏后至攻击前(DTH 的诱导相)期间给药, 对 2,4-二硝基氯苯(DNCB)或 2,4,6-三硝基氯苯(CP)所致的接触性皮炎、SRBC 所致足跖反应的诱导相及在抗原攻击后(DTH 的效应相)给药, 鸡血藤有较明显或显著的抑制作用; 其它三味中药仅在抗原攻击后给药对 PC 所致的 DTH 有较强的抑制作用, 表明这三味中药主要是抑制致敏 T 淋巴细胞释放淋巴因子及其以后的炎症过程。