

水素添加レシチンと Methyl Palmitate により作成した 基剤からの Na Diclofenac の放出

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Release of sodium diclofenac from vehicles prepared with hydrogenated soya lecithin and methyl palmitate.

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ABSTRACT The release of sodium diclofenac (DC) from vehicles prepared with hydrogenated soya lecithin (lecithin) and methyl palmitate was remarkably sustained, and was significantly influenced by each constituent in the vehicle. An increase of DC content as well as that of lecithin enhanced the release of DC. From these results, it is considered that the release of DC seems to be regulated by the infiltration rate of the dissolution medium. However, the release of DC during 24h did not exceed 50% for all vehicles studied. This may be due to the poor solubility of lecithin in neutral water which is an important factor suppressing the infiltration of the medium into the matrix of the vehicle.

To improve the release of DC, mannitol was incorporated into the matrix. As the content of mannitol was increased, the rate of drug release increased without disintegration of the spherical mass. Thus, release of DC from the vehicle can be easily controlled by adjusting the amount of mannitol incorporated into the vehicle.

抄録 水素添加レシチン (HL) と Methyl Palmitate (MP) により作成した基剤からの Na Diclofenac (DC) の放出は徐放性となり, その程度は各分量に影響される。DC 及び HL の添加は放出を早める。DC の放出は, 溶出試験液の進入速度に依存すると考えられる。しかし, 24hr での放出は検討した全ての基剤で 50% を越えない。これは, HL の水への低い溶解度の為かもしれない。

DC の放出を促進するために mannitol を添加すると, 崩壊する事なく DC の放出が促進さ

れた。即ち、DCの放出は mannitol の含量を調整することにより、簡単にコントロールし得る。

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