

Methotrexate

Methotrexate is an enzyme **dihydrofolate reductase blocker**. Thus, the tetrahydrofolate necessary for the transfer of monocarbon fragments is not formed. This prevents the synthesis of nucleotides (specifically thymine) for which tetrahydrofolate is required as a coenzyme. Methotrexate is used to inhibit the proliferation of tumor cells (it acts mainly in the S-phase cell cycle).

Importance

Methotrexate is a commonly used cytostatic, for example in the treatment of leukemia. It is also one of the main drugs in the DMARDs group used to treat rheumatoid arthritis. There are countries where methotrexate is a single conservative treatment for ectopic pregnancies when the patient has low levels of hCG and is in a stable condition.

Links

Source

- ws:Metotrexát

Related Articles

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Reference

Drugs.com. *Methotrexate Injection* [online]. [cit. 2015-10-27]. <<https://www.drugs.com/pro/methotrexate-injection.html>>.