

SY1 PROBLEMS OF NSAIDs IN CLINICAL ASPECT

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The inflammation process can be elicited by numerous stimuli which some are proved and some are unknown, at the present we recognized prostaglandin as main factor. If we interrupt the process of prostaglandin formation at any stage so we can decrease the process of inflammation that induced by this mediator. The most method use is to inhibit the process of prostaglandin formation considered enzymatic block such as the inhibition of inducible cyclooxygenase (COX-2), phospholipase A₂ (PLA₂) etc.

Unfortunately the process of inflammation can be induced by many mediators and chemical substances ie nitric oxide (NO), leukotriene (LT), platelet activating factor (PAF), some cytokines. These mediators, some, are related so if we inhibit one may be effect normal function of the others.

The principle use of NSAIDs can be summarized.

1. Use NSAIDs for process of inflammation not for pain killer or antipyretic.
2. Adjust dose as much as possible especially in long term use.
3. Duration of treatment should be short term, not more than three months.
4. Co-medication with NSAIDs should be avoid or consider drug interaction carefully.
5. Child and elderly people considered as contraindication.
6. Child bearing mother, breast feeding should not be used.
7. Evaluate the efficacy should be more than 3-5 day after medication.

NSAIDs can relieve symptoms and signs of inflammation but the process of disease may need combination of treatment such as physical therapy, rest and some conditions considered surgery.

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 many stimuli, many mediators. → acute inflam. → chronic
 Role of PG on bone.
 1. stim. of 1 α -hydroxylase (over kidney: vit 25 D₃ →
 2. PG has biphasic act. $\left\{ \begin{array}{l} \text{acute} \\ \text{chronic} \end{array} \right\}$
Osteoclast -
 1. induce osteoclastic resorpt via OB → osteoporosis
 2. A cell differentiate of OC
Osteoblast -
 - stim osb. activity: TGF β .
 - inh collagen fiber
 PGE₂ - niche stem cell → osteoblast