

Mefenamic acid – Role as Antipyretic

This is with reference to the advertisement in the November issue of *Indian Pediatrics*, wherein Mefenamic acid has been proclaimed as “The Preferred Antipyretic”. Mefenamic acid is not the preferred antipyretic, for the following reasons:

Safety: This drug can cause frank colitis in patients with no known predisposing factors(1) and generalized tonic clonic seizures in overdose. Mucosal damage may result from impairment of local prostaglandin synthesis and disturbance of the equilibrium between the cyclo - and lipoxygenase pathways of arachidonic acid metabolism. Reports of acute renal failure due to mefenamic acid, have appeared steadily over the past 15 years(2). Most patients presented with abdominal pain and diarrhea and were not oliguric; not all cases were reversible. Even recently eminent journals continue to publish case reports on the side effects of mefenamic acid in children(3).

Indications: The literature search on the indications of mefenamic acid quotes others like mild to moderate pain in acute and chronic conditions including: pain of traumatic, arthritic or muscular origin; dysmenorrhea; headache and dental pain, reducing blood loss in menorrhagia due to ovulatory dysfunctional bleeding rather than as an antipyretic (Wikipedia Drug Formulary).

Contraindications: It is also contraindicated in patients with a history of gastro-intestinal bleeding

and or inflammatory bowel disease. Bronchoconstriction may occur in asthmatic patients with aspirin sensitivity. Mefenamic acid affects platelet function and it may enhance the effect of anti-coagulant therapy which means that it is deleterious in dengue fever and other hemorrhagic fevers which are quite prevalent in present day scenarios. The advertisement quotes it to be given in malaria which in itself can cause thrombocytopenia. It may not be appropriate to use NSAIDs for fever following immunization particularly in young infants.

Preferred antipyretic: Paracetamol has been quoted as the safest antipyretic in children(4) and hence mefenamic acid should not be promoted as the preferred antipyretic.

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REFERENCES

1. Hall RI, Petty AH, Cobden I, Lendrum R. Enteritis and colitis associated with mefenamic acid. *BMJ* 1983; 287: 1182.
2. Robertson CE, Ford MJ, Van Someren V, Dlugolecka M, Prescott LF. Mefenamic acid nephropathy. *Lancet* 1980; ii: 232-233.
3. Onay OS, Erçoban HS, Bayrakci US, Melek E, Cengiz N, Baskin E. Acute, reversible nonoliguric renal failure in two children associated with analgesic-antipyretic drugs. *Pediatr Emerg Care* 2009; 25: 263-266.
4. Chandra J, Bhatnagar SK. Antipyretics in children. *Indian J Pediatr* 2002; 69: 69-74.