CORRESPONDENCE

Salicylate Intolerance
Pathophysiology, Clinical Spectrum, Diagnosis and Therapy

by Prof. Dr. med. Hanns-Wolf Baenkler in volume 8/2008

Some Additional Comments

Inhibition of cyclooxygenase (COX) is correctly described as the cause of intolerance to acetylsalicylic acid (ASS) and other non-steroidal antirheumatic drugs (NSAR). Nevertheless, the term "salicylate intolerance" gives a misleading impression of the pathological mechanism. The feature common to the drugs which cause this effect is not the chemical structure, but rather the mechanism of action as COX inhibitor (1). In contrast to ASS, a potent and irreversible inhibitor of COX-1 and COX-2, the non-acetylated salicylates are only very weak and reversible inhibitors of the two COX isoenzymes (2). This is of direct clinical significance, as patients with severe ASS intolerance develop no, or only slight, symptoms after treatment with non-acetylated salicylates, such as disalycilic acid (salsalate), which is commonly used in the USA (3).

The author recommends that it is particularly important to avoid COX-1 inhibitors. We concur with this, although it should be explicitly mentioned that the intolerance reaction is triggered by inhibi-tion of COX-1 (3). Studies on patients with ASS/NSAR intolerance have found that highly selective COX-2 inhibitors (coxibs) provide a safe therapeutic option for these patients (1, 3). As a legal precaution, the summaries of product characteristics for the coxibs still include the contraindication "ASS/NSAR intolerance", as for all NSARs.

DOI: 10.3238/arztebl.2008.0384a

REFERENCES

1. Randerath WJ, Galetke W: Differenzialdiagnose der rezidivierenden Polyposis nasi: Das Analgetika-Asthma-Syndrom. Dtsch Arztebl 2007; 104(46): A 3178–83.
2. Frölich JC: A classification of NSAIDs according to the relative inhibition of cyclooxygenase isozymes. Trends Pharmacol Sci 1997; 18: 30–4.
3. Stevenson DD, Szczeklik A: Clinical and pathologic perspectives on aspirin sensitivity and asthma. J Allergy Clin Immunol 2006; 118: 773–86.

Prof. Dr. med. Dirk O. Stichtenoth
Vu Vi Pham
Institut für Klinische Pharmakologie
Medizinische Hochschule Hannover, 30623 Hannover, Germany
Stichtenoth.Dirk@mh-hannover.de

Conflict of interest statement
Prof. Stichtenoth has received travel and lecture fees from the firms Abbott, MSD, Novartis and Pfizer.
Vu Vi Pham declares that no conflict of interest exists according to the guidelines of the Interna-tional Committee of Medical Journal Editors.

In Reply:

Professor Stichtenoth's comments are correct; they should be generally accepted. Thus, the widely used term "analgesic intolerance" is wrong. It is particularly important in medicine to use precise definitions, as medicine is often felt to be an art rather than a science.

This is unfortunately not always successful enough during routine work. There are always "exceptional cases", which is why (as pointed out by Professor Stichtenoth) the contraindication is still included as a precaution in the summaries of product characteristics for the coxibs.

As my article was intended to be an overview of the arachidonic acideicosanoid complex, and not just to cover intolerance, I should just add that the special features I described also include proliferation, especially in the gastrointestinal tract.

DOI: 10.3238/arztebl.2008.0384b

Prof. Dr. med. Hanns-Wolf Baenkler
Medizinische Universitätsklinik 3
Krankenhausstr. 12
91054 Erlangen, Germany

Conflict of interest statement
The author holds the patent for the functional eicosanoid test.

Translated from the original German by Rodney A. Yeates, M.A., Ph.D.