Safety of nimesulide, meloxicam and rofecoxib as alternative analgesics

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SUMMARY

Paracetamole and codeine are safe alternative analgesics for analgesic intolerant patients. Recently marketed selective and specific COX2 inhibitors are also considered to be safe for this group of patients. In this survey we wanted to disclose the safety of nimesulide and meloxicam and rofecoxib where they have been marketed recently in Turkey.

Key words: Analgesic intolerance. Codeine. Nimesulide. Meloxicam. Paracetamole. Rofecoxib.

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INTRODUCTION

Intolerance to acetylsalicylic acid (ASA) and nonsteroidal anti-inflammatory drugs (NSAID) is an important problem since these are among the most commonly prescribed and used drugs all over the world (1). The prevalence of analgesic intolerance (AI) is reported to be less than 1% in general population where it reaches up to 20% in certain risk groups (2, 3). Paracetamole and codeine are safe alternative analgesics (3, 4). Nowadays there is a new group of drugs which are selective and specific COX2 inhibitors all of which are reported to be safe altenatives for analgesic intolerant patients (5-10). Among these, nimesulide and meloxicam have been reported to cause reactions in 0-20% of these patients (5-7, 9). There is only one report about tolerability of rofecoxib where there was no reaction to rofecoxib in 3 patients (10). In this survey we wanted to disclose the safety of nimesulide and meloxicam and rofecoxib where they have been marketed recently in Turkey.

MATERIAL AND METHODS

Of the 463 analgesic intolerant patients admitted to Hacettepe University Hospital Adult Allergy Unit between January 1991 and march 2000 with the purpose of finding an alternative analgesic oral provocation tests (OPT) with various analgesics were performed in 278 of them. OPT was performed with codeine in 174, with paracetamole in 155, with nimesulide in 99, with meloxicam in 74 and with rofecoxib in 15 patients.

In addition to the methods which are reported before (4); one quarter, one half, three quarters and whole of the 100 mg, 7.5 mg, and 12.5 mg tablets of nimesulide, meloxicam and rofecoxib were used for oral provocation, respectively.

RESULTS

The mean age of the patients who have undergone oral provocation testing was 40.7 ± 12.6 and 209 (75.2%) were females. The accompanying diseases and conditions were bronchial asthma in 124 (44.6%) of them, rhinosinusitis in 118 (42.4%), antibiotic allergy/intolerance in 69 (24.8%) food allergy/intolerance in 63 (22.7%), metal allergy 47 (16.9%), nasal polyps in 44 (15.8%), dermographism in 35 (12.6%) and chronic urticaria in 30 (10.8%). There was a history of familial atopy in 136 (48.9%) of the patients and familial AI in 25 (9%). Routine skin prick tests by common aeroallergens were positive in 54 (23.3%) patients out of 232 in whom the tests could be performed.

Table I

Oral provocation test results

	Codeine	Paracetamole	Nimesulide	Meloxicam	Rofecoxib
Tests performed	N = 174	N = 155	N = 99	N = 74	N = 15
Positive tests n (%)	16 (9.2)	21 (13.5)	18 (18.2)	8 (10.8)	1 (6.7)
Urticaria	10 (5.8)	10 (6.5)	13 (13)	4 (5.4)	1 (6.7)
Angioedema	1 (0.6)	5 (3.2)	1 (1)	4 (5.4)	0
Bronchospasm	3 (1.7)	7 (4.5)	4 (4)	5 (6.8)	0
Anaphylaxis	0	0	1 (1)	0	0
Rhinitis	2 (1.1)	0	0	0	0

There was history of intolerance to aspirin in 164 (59%), to metamizole in 125 (45%), to paracetamole in 77 (27.7%), to naproxen in 67 (24.1) and to other analgesics in 35 (12.6). The reactions were urticaria in 139 (50%), angioedema in 132 (47.5), bronchospasm in 100 (36%), rhinitis in 14 (5%) and gastrointestinal symptoms in 5 (1.8%) of them by anamnesis.

Results of the OPT are given in table I. Among the nimesulide test positive patients one of them showed a reaction which was a late one in the form of angioedema in the pharynx and uvula appearing about 10 hours later. The patient had been treated in the emergency room. The reaction in the positive test for rofecoxib was an acute activation of chronic urticaria.

DISCUSSION

Analgesic intolerance is more common in middle aged females and there are some diseases accompanying this condition like asthma, rhinosinusitis and chronic urticaria reported before with which our current results are in accordance (2-4). Intolerance to aspirin, metamizole and paracetamole are most common in this survey and the previous one (4) which may be due to their common use.

It's important to suggest alternative analgesics to the analgesic intolerant patients most of whom are frightened to use any analgesic even when they have severe pain. However, we can not directly suggest some drugs as the results show some patients have intolerance to these "safe" called drugs to some extent, so OPT should be performed before suggesting an analgesic to these patients. At least one alternative analgesic was found for the tested patients and the safety of nimesulide, meloxicam and codeine are similar to that of codeine and paracetamole. Although reactions are expected in up to 180 minutes in analgesic intolerance there might be some late reactions similar to one of our patients' as reported with nimesulide. OPT with rofecoxib are performed in only 15 patients because it has been marketed for the last 2 months in Turkey. The positive reaction in one patient to rofecoxib was an acute activation of chronic urticaria which might also have been precipitated with stress due to the test. It will be appropriate to wait for the results of future tests with more patients. As a result, at least one safe alternative can be find for the analgesic intolerant patients who are tested with this purpose.

RESUMEN

El paracetamol y la codeína son analgésicos alternativos sin riesgos para pacientes intolerantes a los analgésicos. En este grupo de pacientes también se consideran seguros los inhibidores selectivos y específicos de la COX2, comercializados recientemente. En este sondeo tratamos de identificar la seguridad de nimesulida y meloxicam y rofecoxib que se han comercializado recientemente en Turquía.

Palabras clave: Intolerancia a los analgésicos. Codeína. Nimesulida. Meloxicam. Paracetamol. Rofecoxib.

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