

LETTER TO THE EDITOR

OVERUSE OF PRESCRIPTION AND OTC NON-STEROIDAL ANTI-INFLAMMATORY DRUGS IN PATIENTS WITH RHEUMATOID ARTHRITIS AND OSTEOARTHRITIS

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Non-steroidal anti-inflammatory drugs (NSAIDs) have been demonstrated to have significant cardiovascular and gastrointestinal toxicity; high dose of intake and concomitant use of multiple compounds or corticosteroids are factors that increase the risk of NSAID toxicity. In this paper we described our experience on NSAIDs misuse (both prescribing and OTC formulations), particularly relevant in the setting of rheumatoid arthritis (39.5% of patients) and osteoarthritis (47% of patients). We also evaluated causes underlying NSAIDs misuse (e.g. not satisfactory pain control, other painful conditions, etc).

Non-steroidal-anti-inflammatory drugs (NSAIDs) are commonly used for the treatment of chronic diseases such as osteoarthritis (OA) and rheumatoid arthritis (RA). These drugs have been demonstrated to have significant cardiovascular (1, 2) and gastrointestinal toxicity (3), in particular with high dose intake or concomitant use of multiple compounds (4) or corticosteroids (5). NSAIDs are commercially available either as prescription-drug or over-the-counter (OTC) medications. OTC formulations contain lower dosages of the active principle as compared to the corresponding prescription drug, however, this does not necessarily correlate with safer patient outcome (6). From January 2012 to September 2012, a convenience sample of consecutive RA and OA patients being followed-up in our outpatient-clinic and for whom we had previously prescribed NSAID were evaluated for NSAID patterns of consumption.

Per clinic protocol, all patients are informed of the safety risks and precautions related to NSAID use. Five hundred forty-six RA and 508 OA were assessed. In all cases the NSAID prescribed in our clinic was taken correctly, according to our indications. In the 2 months preceding the visit, 216 RA patients (39.5%) concurrently took additional NSAIDs (over-users) and 147 (27%) were simultaneously on chronic corticosteroid treatment. Nimesulide (N= 90; 16%), acetyl-salicylic-acid (N=57; 10%) and OTC ibuprofen or diclofenac (N=105; 19%) were the most frequently associated NSAIDs. Incomplete pain control (N=105; 19%), headache (N=111; 20%), fever (N=51; 9%) and dental pain (N=24; 4%) were the predominant reasons for additional NSAID treatment as prescribed by other physician or self-administration. Neither gender (p=0.0834) nor mean age (p=0.2564) were different between NSAID over-user and non-over-

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Table I. Characteristics of patients evaluated.

	Rheumatoid arthritis	Osteoarthritis
Patients' number	546	508
NSAIDs non over-user	330 (60.5)	268 (53)
mean age (years) \pm SD non over-user	66 \pm 11.2 §	68.2 \pm 7 £
Females/male non over-user	250/80 ^	155/113 °
NSAIDs over-user (%)	216 (39.5)	240 (47)
mean age (years) \pm SD over-user	65 \pm 8 §	67 \pm 11 £
Females/males over-user	149/67 ^	150/90 °
NSAIDs over-user with concomitant corticosteroids (%)	147 (27)	0 (0)
Reasons for NSAIDs over-use		
unsatisfactor pain disease control	105 (19)	104 (20)
headache (%)	111 (20)	56 (11)
fever	51 (9)	56 (11)
dental pain (%)	24 (4.5)	48 (9)
other reasons* (%)	0 (0)	10 (2)
more than 1 reason (%)	57 (10)	48 (9)
Associated NSAIDs		
nimesulide (%)	90 (16)	72 (14)
diclofenac (%)	12 (2)	8 (2)
piroxicam (%)	18 (3)	4 (1)
COXIBs (%)	6 (1)	12 (3)
acetyl-salicylic acid (%)	57 (10)	108 (21)
other prescribing NSAIDs (%)	6 (1)	0 (0)
total OTC (%)	105 (19)	80 (16)
OTC ibuprofen (%)	81 (15)	60 (12)
OTC diclofenac (%)	24 (4)	20 (4)

* other reasons: post-traumatic pain, menstrual pain, fatigue. ^ $p=0.0834$, ° $p=0.3184$, § $p=0.2564$, £ $p=0.1367$

user RA patients. In the same period, 240 OA patients (47%) took additional NSAIDs as prescribed by other physicians or self-administration. Nimesulide (N=72;14%), acetyl-salicylic-acid (N=108; 21%) and OTC ibuprofen or diclofenac (80 patients; 16%) were the mainly associated NSAIDs. Incomplete pain control (104 patients; 20%), headache (56 patients; 11%), fever (56 patients; 11%) and dental pain (48 patients; 9%) were the main reasons for additional NSAID use. Sex ($p=0.3184$) and mean age ($p=0.1367$), were not different between NSAID over-user and non-over-user OA patients. Table I characterized differences between RA and OA patients. Overall analysis reveals: a) NSAID overuse is common in both RA and OA; b) it involves both

prescription and OTC drugs; and c) very importantly, conditions other than disease-related pain may lead to additional NSAID consumption as the result of physician prescription or self-medications. These findings indicate that physicians do not always take into account the pharmaceutical background of patients and patients are not completely aware of risks associated with NSAID use, despite having been previously informed, or perhaps are not familiar with other medications in the family of NSAIDs. Based on these patterns of misuse revealed by this study and others (7), clinicians must enhance their own habits of medication reconciliation in regard to multiple NSAIDs and concomitant glucocorticoid use as well as their approach to patient education in order to

emphasize safe NSAID use and hopefully reduce the risk of NSAID-related side-effects.

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