FOREWORD

In the occasion of the last World Society of Pain Clinician's congress, held in Sardinia (4–8 May 2002, S. Margherita di Pula [CA], Italy), a symposium was dedicated to presentation of the most recent information on the control of pain by NSAIDs, and in particular by nimesulide.

Nimesulide is a well-known NSAID that has been used with unquestionable success in many countries all around the world. Its use is frequent in a variety of diseases, from osteoarthritis to musculoskeletal disorders, and from dysmenorrhoea to ear, nose and throat disorders, and so on – all conditions with a common problem: a painful status.

The eminent and renowned speakers invited to divulge novel findings on the role of nimesulide in the control of pain symptoms were able, by way of the interesting results of their research, to widen our knowledge in terms of both mechanisms of action and clinical results.

A great deal of information concerning modulation of the mechanisms of pain is contained in these Proceedings, beginning with the 'history' of pain modulation by NSAIDs. This was excellently shown by F. Camu, who explained how the inhibition of the cyclo-oxygenase (COX)-2 enzyme, specifically at central levels, is able to modulate the perception of the painful stimulus in any condition of inflammatory pain.

As very often happens, 'basic' information on the mechanisms of action of a compound has been obtained from experimental animal models. C. Tassorelli gave a remarkable illustration of the results of a set of experiments that demonstrated that the administration of nimesulide was able to reduce significantly the sensation of pain resulting from the induction of a hyperalgesic stimulus. These results also indicated that the control of pain is modulated at the level of the central nervous system.

G.M. Pasinetti, reporting the results of another set of experiments in animal models, not only confirmed that the analgesic properties are mediated by the central activity of this compound, but also provided evidence that particular protein species are increased during inflammatory pain. This interesting work, using the novel proteomic technique, provided new information on these protein species, which were isolated and characterised, and established the basis for future research aiming at defining human biomarkers of inflammatory pain, with a view to better therapeutic intervention.

Two studies in patients were then presented with the aim of demonstrating how all these interesting findings concerning the mechanisms of action may form the basis of the undoubted effectiveness of nimesulide in relieving pain in man.

T. Duffy presented the results of a trial in patients with acute inflammation of the knee, which confirmed both the rapid inhibition of the COX-2 derived

prostaglandins and the possible involvement of a central activity of nimesulide in the control of pain. The latter was suggested by a delayed local concentration of nimesulide at the joint level, despite the rapid onset of analgesia.

The other interesting clinical trial was presented by M. Bianchi, who observed the activity of different NSAIDs that specifically inhibit COX-2 – nimesulide, celecoxib and rofecoxib – in the control of the painful condition associated with osteoarthritis. All these drugs, acting on the same central mechanisms of pain modulation, were able to achieve an effective reduction in the pain associated with the underlying disease, although nimesulide demonstrated a faster onset of analgesic activity than the other two compounds, beginning to reduce the painful symptoms as early as 15 minutes after administration.

These results provide further support for the use of nimesulide as an excellent alternative in the large family of NSAIDs, not only because its outstanding efficacy profile is continuing to be demonstrated by its success worldwide, but also because its outstanding analgesic properties are an important 'plus' for such a compound. Furthermore, in addition to having a significant efficacy profile, nimesulide is repeatedly demonstrated to be a safe drug, in terms of both the number of patients treated worldwide and the relatively low number of adverse events recorded (one adverse event in approximately 267 500 patients).

The information provided during this session of the congress received a wide acceptance by the many participants. This led to a long and interesting discussion during which many questions were presented to the speakers. F. Camu, in particular, was able to provide all the necessary and requested explanations to resolve any doubts that the audience had. As is usual on such occasions, the majority of the questions concerned clinical data, which are of enormous interest in the case of drugs that have been in clinical use for many years.

As congress organiser, I wish to thank the sponsor of this session, who gave the participants the opportunity to clarify a topic of extreme interest: the correct use of a widely used drug.

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