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YETUNDE A. AKEN'OVA

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A. O. OGUNNIYI
O. D. OLALEYE

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Sir,

Dipyrone: The Ban, The Justification

Dipyrone is a member of the pyrazolone group of non-steroidal anti-inflammatory drugs. Other members of this class of non-steroidal anti-inflammatory drugs include Aminopyrine, Antipyrine, phenylbutazone and Oxyphenbutazone [1]. Dipyrone is also known as metamizole, noramidopyrine, novamin sulphone and methampyrone has been available for clinical use since 1920s. The drug has only weak anti-inflammatory action but analgesic antipyretic effect is comparable to that of aspirin. It is one of the few analgesic drugs available for parenteral use in Nigeria. The drug is widely used for treating pain of medical and surgical origins at private and at all levels of care in the government owned hospitals in the country. On account of unacceptable risk of Dipyrone related agranulocytosis, the drug was banned in 1974, re-instated in 1985 and re-banned in 1999 in Sweden [2]. The drug has also been banned in the United States, Australia, United Kingdom and some other European countries for same reason. However, France and other European countries, South-Africa, India, Brazil, Israel and Thailand still continue to make use of the drug. The authorities in these countries have found out that the drug has acceptable safety profile for their citizenry [3,4]. It was generally assumed that the drug had good safety profile in Nigeria up until the notification of ban by the National Agency for Food Drug Administration and Control (NAFDAC) a few months ago. The ban is scheduled to take effect next January 2006.

The ban and manner of it suggests some arbitrariness as inferred from the content of the release on the ban. In fact NAFDAC's response could be considered an impulsive reaction to a scientific question. The loss of human life as noted in the release is highly regrettable and one accepts that there is absolute need to protect Nigerians from such preventable deaths. It is however, disheartening to note that the National Pharmacovigilance Centre and NAFDAC will ban a drug based on grossly insufficient data. The ban was based on a report of suspected serious adverse effects in two of 14 girls who were given the drug together with other medications on said occasion. Whereas preliminary evaluation of a study conducted in 2003 concluded that Dipyrone was well tolerated in all the 282 patients who had it. We also noted that the drug was widely used by both surgical as well as medical patients. Both oral and injection forms were used alone or in combination with other analgesic drugs and 222 (78.7%) of the 282 patients had injection. Similar results of safety profile have been documented in prospective studies carried out in Brazil, Thailand and Israel [5,6,7].

One is further disturbed that NAFDAC claimed to have proven the case of adverse drug reaction beyond

reasonable doubts in such an uncertain circumstance. One wonders if the said patients did not take other drugs and why it was concluded that Dipyrone was the cause of the toxic epidermal necrolysis described in one of the two cases in question. Interestingly, the second case appears like a poorly managed injection abscess. The authorities refused to mention the actual brand of dipyrone in question in her alert and subsequent release on ban of the drug. One would like to know if any efforts were made to determine whether the manufacturer of the suspected drug complied with Good Manufacturing Practice with a view to excluding specific product problems.

Should one, for the sake of argument wish to sustain adverse drug reaction in these cases, it would have been appropriate for NAFDAC to commission an independent investigation into the matter. One would also have expected NAFDAC to sponsor and/or arrange sponsorship for nationwide properly conducted studies on the adverse effects of Dipyrone. At least, it is not evident that such efforts were made thus the decision was rather hasty and merely confirms that the drug was banned either because it has been banned in a number of European countries and the US or for undisclosed reasons. As noted earlier, agranulocytosis was the reason adduced for the ban in the countries concerned but studies conducted in France, Thailand and Brazil did not confirm similar risk thus the drug is still in use in these and many other countries.

I am not suggesting that Dipyrone is absolutely safe, no drug is and I am also not suggesting that appropriate authorities could not ban a drug especially if the safety profile of the drug is in doubt. The fact is that Dipyrone was banned without recourse to due process, perhaps simply taking a cue from the United States and Britain. The era of such extrapolation of results across racial, national, regional and even community divide is fast receding with the advent of pharmacogenetics which seeks to individualise remedies.

A mention should be made of the dearth of parenteral analgesic drugs in this country since opioids are unavailable even at the University College Hospital, Ibadan. Certainly, banning Dipyrone at this time has further compounded the problems of pain management in Nigeria. Ghana produces at least one brand of opioid, Nigeria with its endowment lacks such important facility, one wonders whose interest such indifference about management of the commonest symptom of ill-health is serving.

In conclusion, I wish to state unequivocally that one and all must be 'pharmacovigilant' since all these remedies have their adverse effects and the onus is on the appropriate health care providers and other stakeholders to work in concert to minimize unwanted drug effects. However, such decisions as these ought to be taken after the risk-benefit ratios have been duly assessed. My opinion is that the ban be re-visited and appropriate studies carried out to determine the culpability or otherwise of Dipyrone in this case.

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FA Fehintola

*Department of Pharmacology and Therapeutics,
College of Medicine, University of Ibadan, Ibadan,
Nigeria.*

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