

studies are necessary to understand the immunopathogenesis of PR; such studies should help clinicians identify patients who are at higher risk for paradoxical deterioration during TB treatment and better control its clinical manifestations.

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Glucose Homeostasis Abnormalities and Gatifloxacin

SIR—We read with interest the recent publication by Frothingham [1] reviewing spontaneous adverse event reports (AERs) on gatifloxacin-associated hypoglycemia or hyperglycemia received by the US Food and Drug Administration. Frothingham's review indicated a clear signal of a higher

rate of reports of glucose homeostasis abnormality for gatifloxacin, compared with ciprofloxacin, levofloxacin and moxifloxacin. Our own review [2] of the spontaneous AERs received by the Canadian Adverse Drug Reaction Monitoring Program reported findings that paralleled those made by Frothingham. The Canadian Adverse Drug Reaction Monitoring Program tracks reports of hypoglycemia or hyperglycemia in a category called "Metabolic and Nutritional Disorders." We found that 93% of all spontaneous AERs in this category for gatifloxacin involved either hypoglycemia or hyperglycemia. Conversely, only 11% of reports for levofloxacin and 10% of reports for moxifloxacin in this category involved either hypoglycemia or hyperglycemia. Analysis of our data indicated that there were significantly more reports of hypoglycemia ($P < .008$) associated with gatifloxacin treatment than with either levofloxacin or moxifloxacin treatment. Similarly, the total number of reports involving glucose homeostasis abnormalities (either hypoglycemia or hyperglycemia) were significantly higher for gatifloxacin ($P < .0001$). The signal was even more striking when we observed that the number of retail prescriptions for gatifloxacin in Canada during the period of analysis was approximately one-tenth of the number of levofloxacin retail prescriptions and one-third of the number of moxifloxacin retail prescriptions [3]. Although we acknowledge the limitations of spontaneous AERs, we would like to highlight the importance of AER surveillance in detecting adverse events that occur rarely (i.e., in $<1\%$ of patients) [1].

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