

alternatives to visual inspection of graphed results, especially if an "experienced reader" is not available to interpret the graphs. Among experienced readers, visual inspection has a reported sensitivity of 87% and specificity of 84% compared with specific challenge tests.² Even if a computerized or other objective method of interpretation is used, it may be helpful to inspect visual records and review records of symptoms (e.g., of upper respiratory infection), medications and other relevant factors, such as unusual workplace exposure, all of which may be relevant to the interpretation of changes in peak flow.

Compliance with serial recordings is often suboptimal.^{1,3} Although we agree that 2-hourly recordings of peak expiratory flow rate provide greater sensitivity than 4-hourly measurements (73% v. 61%),⁴ many workers may find it difficult to adhere to this schedule. Such difficulties with compliance may be particularly important when monitoring is required for prolonged periods both at work and away from work. Four-hourly recordings (before work, midshift, after shift and at bedtime) are less likely to interfere with the patient's work schedule and are usually more practical, especially for industrial workers.

Regardless of the method used, a significant minority of records are typically incomplete or inconclusive.⁵ Therefore, several investigations should be performed, if possible, to improve the accuracy of diagnosis of work-related asthma.

Susan M. Tarlo

Gary Liss

Gage Occupational and Environmental Health Unit

St. Michael's Hospital and University of Toronto

Toronto, Ont.

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COX-2 inhibitors and type 4 error

Further to Walter Maksymowych's letter¹ about James Wright's article on cyclooxygenase-2 (COX-2) inhibitors,² we would like to add that disclosure of competing interests and presentation of contrary viewpoints tend to reduce the likelihood of bias contributing to the "tomato effect," also known as type 4 error. This type of error is an overestimation of risks, which leads to rejection of an efficacious therapy.³

Concerns about the possibility of type 4 error in this case are reinforced by a summary of the Wright article published recently in *BMJ*,⁴ which states that "This is an excellent (although non-systematic) review of the benefits and harms of COX-2 inhibitors." It has been overlooked that Wright, in disregarding systematic reviews and meta-analyses on COX-2 inhibitors, has missed a large body of relevant evidence, including differences between individual NSAIDs.⁵⁻⁸

Before the publication of Wright's article, several other authors presented critical views regarding the cardiovascular safety of COX-2 inhibitors under the guise of scientific objectivity.⁹⁻¹¹ Some argued that use of acetylsalicylic acid (ASA) might change the cost-effectiveness of COX-2 inhibition by reducing gastrointestinal benefit; hence, there would be no justification for prescribing a more expensive therapy.¹¹ However, these authors overlooked the benefits of the combination of ASA and COX-2 inhibition relative to less-

expensive options such as ASA combined with a non-ASA NSAID or a non-ASA NSAID alone. These benefits include better gastrointestinal tolerability, sustained inhibition of platelet aggregation and freedom in the dosing regimen.¹²

Michal R. Pijak

Consultant Rheumatologist

Frantisek Gazdik

Research Fellow

Department of Clinical Immunology

Institute of Preventive and Clinical Medicine

Bratislava, Slovakia

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