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Limitations of Our Focus on Medication Management of Disease

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Integrative Medicine is the practice of medicine that reaffirms the importance of the relationship between practitioner and patient, focuses on the whole person, is informed by evidence and makes use of all appropriate therapeutic approaches, health care professionals and disciplines to achieve optimal health and healing.

—Consortium of Academic Health Centers for Integrative Medicine, 2009

The Arizona Center for Integrative Medicine is currently training physicians to think beyond medications to provide health and healing to patients. The approach incorporates nutrition, exercise, stress management, and other natural healing strategies. Rather than focus on only medications to manage disease, completing their fellowship taught me many other treatment approaches.

Recently, events surrounding medications in the treatment of diabetes have reinforced my belief in the importance of knowing multiple different approaches. This spring, two European nations removed pioglitazone from their diabetic treatment armamentarium. Reportedly, a prospective study in France designed to study the effect of prolonged use of pioglitazone on bladder cancer was completed just two days before the drug regulatory agencies of France and Germany pulled the drug from the market. (This study is currently unpublished.)

To date, the FDA has announced no plans to withdraw pioglitazone from the US market. In fact, recently published interim data for an ongoing prospective, observational study through Kaiser Permanente Northern California demonstrated an increase in rates of bladder cancer in patients taking pioglitazone but with a weakly significant confidence interval. After more than 24 months of use of pioglitazone, the hazard ratio was 1.4 (95%

CI 1.0-2.0); after more than 48 months of use, the HR was 1.7 (95% CI 1.1-2.9).¹ Of course, there are several limitations of this information. The results are based on interim analysis only, and the data have been collected from a single geographic area.

Less well publicized was a recent meta-analysis regarding use of thiazolidinediones and increased incidence of pneumonia. This was not a prospective study, and the confidence interval was also close to being non-significant.² Still, more and more doubts are rising over the toxicity of this commonly prescribed class of medication.

The real issue is not whether pioglitazone causes an increase in the risk of bladder cancer and pneumonia, although that is incredibly important. As a primary care physician who treats diabetes in at least 20% of my patients, the concern is whether to trust what we know about the pharmaceutical tools in our diabetic treatment plan. In order to understand this, we need to rewind one year to the story with pioglitazone's cousin, rosiglitazone.

In a meta-analysis by Nissen in 2007, rosiglitazone was reported to be associated with an increase in risk of myocardial infarction.³ While criticisms of this review were plenty, eventually the FDA significantly restricted access to rosiglitazone to prescribers. This, of course, led to an increase in prescriptions written for pioglitazone.

As physicians, we require trust in our daily operations. We trust our patients to tell us the truth. We trust our staff to schedule patients, listen to their complaints, triage patient issues, and follow through on clinical results. We trust our partners to cover us and on our practices to support us. We trust, every day, that we have quality information with which we make recommendations for patient care.

In much the same way that I would struggle to continue to employ a staff member who was not providing complete patient messages to me, the one-two punch regarding thiazolidinediones causes me to worry that I am not taking the best care of my patients. If my medications are causing harm, I must look for alternatives. If no alternatives are available, I must discuss and accept the associated risks with my patients.

With diabetes specifically, we know there is a better approach. Prevalence of diabetes has climbed dramatically and closely follows the rates of obesity. We know that better, more healthful diets will lead to less weight gain and less diabetes. Despite this knowledge, the system creates an uphill battle to take this approach and make it successful.

Our experts as well are seemingly focused on treatment rather than prevention. In the 15 years since I started medical school, I have attended innumerable talks

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and lectures on diabetes. In my experience, most presenters start with the pathophysiology and genetics, touch fleetingly on any lifestyle management options, and focus on the pharmaceutical approach to management. I have to think that we are missing the boat. It's possible, and even likely, that we hesitate with this treatment approach because of the difficulty in successfully aiding patients in behavioral change around diet, exercise, and weight loss. Still, we have shifted too far from even discussing these strategies with patients and have a system that minimally supports nutritional counseling and diabetes education.

I'm glad that we have medications to treat disease. I understand that clinical effects will always become known once a medication is administered to real patients many

more thousands of times in clinical practice versus phase 4 studies. I am certain, however, that the new potential risks with rosiglitazone and pioglitazone will cause hesitation when prescribing these medications. It reinforces my belief that we need to put more focus on prevention and nutritional approaches to diabetes.

Real change in this direction requires the support of our health care culture to decrease diabetes incidence rather than simply treating it when it occurs. This is the power of an integrative medicine approach—to use medications when necessary but to invest more energy on strategies that we can be certain are non-toxic. After all, nobody has reported increased rates of bladder cancer or heart disease with healthy diets and weight loss.

References

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