EDITORIAL

Clinical Inertia: Hard to Move It Forward

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Internal medicine and medical subspecialty physicians pride themselves on their thoughtful and cautious approach to the patient. "First do no harm" has been the motto of internists more so than most specialists. For many decades, internists prided themselves on protecting their patients from unnecessary treatments and procedures. One can readily recall episodes when this attitude was verified. Medications brought to market with great promise later caused major, even catastrophic side effects when widely used. Even recent guidelines for aggressive lowering of hemoglobin A1C in diabetes have recently been modified somewhat because of adverse effects.[1] Yet cautiousness can creep into being inertia and cause mismanagement.

Clinical inertia is defined as a failure to escalate treatment in a patient whose results reveal an inadequate response under their current medical regimen.[2] This leads to the failure to achieve well-established therapeutic goals set by expert guidelines because of the unwillingness of physicians to respond. Physicians may argue that the label "clinical inertia" does not take into account clinical judgment, individualized treatment, or cautiousness in the endorsement of new therapies, hence threatening the sanctity of the physician-patient relationship. However, it is worth emphasizing, clinical inertia applies to achieving the treatment goals of well-established expert guidelines.

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It is of interest why we now speak of clinical inertia. One of us can recall only ten or fifteen years ago, being asked by the distinguished chairman of a department of medicine, "Why all this talk about evidence-based medicine? Haven't we always practiced evidence-based medicine?" Well, the answer is no. As recently as 1970, little evidence existed in favor of many well-established treatments used today. Medical historians could uncover a long period of confusion over questions like: Will lowering the cholesterol improve outcome in heart disease? And, does lowering elevated blood pressure improve clinical outcomes? Large clinical trials to answer these questions were only completed in the 1970s and 80s. Thus, evidence-based medicine is a useful term today because we finally have evidence.

This evidence should change the practice of medicine. It should make us more aggressive in achieving goals because now we know that patients will benefit. Secondly, medications for the treatment of common chronic conditions like hyperlipidemia and hypertension are more effective and safer than they were in the past. As a result, internists need to be more aggressive in achieving goals and while always taking the individual patient's risk factors into account, should seek to comply with established guidelines.

As often happens, when we look at the process of care we discover that we are not achieving what we said we should; hence, the concept of clinical inertia. It was realized that physicians would see patients in regular visits, perhaps every 3 to 6-months, and take note of an elevated blood glucose value or suboptimally controlled blood pressure, yet persist with the same treatment. In evaluating why changes weren't made, it usually appeared that the physician planned on escalating treatment in the future. Perhaps the current treatment was continued to see if it would begin to work better, or if the patient would improve adherence, begin to exercise, or lose weight resulting in the desired outcome. This would have been consistent with good medical practice 30 years ago when the available treatments might have been less effective, evidence for benefits may

have been minimal, and side effects have been as threatening as the benefits of increasing treatment. Assuming non-adherence can be dealt with at the time of the visit, these highly cautious approaches do not apply in most cases today. Physicians should obtain the proven benefits of achieving therapeutic goals.

In this issue of *Revista Española de Cardiología*, Lázaro et al on behalf of the Inertia Study Investigators present data from a national multicenter observational study on the extent of clinical inertia in treating dyslipidemia in ischemic cardiomyopathy by cardiologists.[3] Clinical inertia was detected in 43% of visits. This degree of clinical inertia is similar to that found in studies in the United States and in the United Kingdom. In the Spanish study only 26% of patients reached the target goal of lipid therapy after three years of follow-up.

This study has validity as it includes observations of 10 patients of each of 155 participating cardiologists. Inertia was present when a change in medication to achieve therapeutic goals set by guidelines was indicated, no previous adverse effects of therapy had been documented, and no change was made. Using these criteria, inertia was present in 42.8% of the visits and was judged to be a high degree of inertia in 29.5% and a very high degree in 28.9% of this sub-set.

The authors examined variables that might be associated with clinical inertia. Clinical inertia was less likely in more experienced physicians caring for young patients (age <55 years). Clinical inertia was significantly higher in the multivariate analysis in diabetic patients whose LDL-C ranged between 70-100 mg/d as compared to those with LDL-C >100 mg/dL or whose total cholesterol was ≤200 mg/dL, as well as when the HDL-C level was high. Association with hours of training was conflicting. Whereas, attendance at congresses correlated with less inertia, attendance at local training sessions correlated with more clinical inertia.

The results of this study provide valuable information, but not the full explanation for the stubborn persistence of clinical inertia. These data suggest some advantages in having continuing medical education programs emphasize escalation of therapy to achieve goals even when mildly as opposed to severely above recommended levels. But it appears unlikely we will solve the problem of inertia by looking for characteristics of physicians or laboratory tests that have an association. Lázaro et al identified no readily available pathways for substantially changing the habits of doctors and patients. We propose that research should now be shifted to seeking solutions imbedded in the system. System-based changes may offer the most likely means to combat clinical inertia.

One way to change the system may be through the increasing use of the electronic medical record. This will require thought and study. Reminders work apparently only so long as they are given. And too many reminders may seem overwhelming and tend to be ignored. It should be possible, however, to find a type of reminder that will diminish clinical inertia.

Another systems-based approach could be developing guidelines that incorporate overcoming clinical inertia. For example, the guidelines for adjustment of hyperglycemic therapy could include a recommendation based on casual postprandial plasma glucose levels (1-4 h after a meal) at the time of the visit.[4] In the case of hyperlipidemia, a guideline could be developed to adjust treatment based on non-HDL-C in patients, after non-fasting blood draws.[5-7] These values are available quickly and do not require the patient to return for fasting studies. The point being, that in our system of guidelines, we should make overcoming clinical inertia a priority.

Another approach to changing the system could focus on involving the patient. Easily readable short messages informing patients of their targets and encouraging them to discuss their therapy with the physician could enroll the patient as a partner in achieving desired results.

In summary, Lázaro et al have once again documented the stubborn persistence of clinical inertia. Their study suggests that the problem will be difficult to overcome. In looking to the future, we suggest a systems-based approach might now become the focus of research. With this extra push, individual physicians might achieve what they know and say they should achieve.

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