



The Society for Cardiac Angiography & Interventions

SCAI President's Page



The Discharge

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We all do it every day. We stop by at 7 a.m. and send another sleep-deprived, anxious, tentative patient back into their forever-changed world. Yesterday he was hanging kitchen cabinets when he felt an oppressive chest pain and fell to the dusty floor. We greeted him during his first encounter with the health care system using the dreaded words “you’ve had a small heart attack.” Only the big “C” word could have done more damage to his already deflating self image.

By noon we had exposed him (in every sense) to our efficient staff, invaded his groin and left him with a tiny bit of stainless steel as a memento. Still groggy, he struggled to keep his composure for his family and the gaggle of well wishers who arrived after dinner. A few unopened booklets lay on the bedside table, testimony to the attempts of the nurses to educate him about his new condition. Then, first thing in the morning, having been beta-blocked, Plavix-loaded and vaso-dilated off he goes with his bag of scripts, the still unopened booklets, and the fully executed discharge papers. What is he to expect? What will life be like now that he is a “heart patient”? How well will his doctors do in assisting his recovery? Unfortunately, not very well.

A recently published article has again confirmed that we do poorly at following widely accepted standards of care [1]. Overall, 68% of the patients surveyed in this study received the recommended care for coronary artery disease. Among the acute infarction patients only 45% received beta-blockers and only 61% received aspirin. Hyperlipidemia care was appropriately delivered only 48.6% of the time. More apropos to the patient we just discharged, follow-up care was appropriate only 58.5% of the time and counseling/education care was appropriate for only a dismal 18.3% of indicators. This is most newsworthy because we have made little progress over the past ten years despite active study in this area. In the 1992 time frame, 78% of patients post-infarction were discharged on aspirin and 12% on beta-blockers. After institution of a concerted training effort these discharge rates were increased two years later to 92% and 61%

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respectively [2]. While active training improved rates during *this* study, it is apparent that physician compliance with guidelines at large in the United States has not improved.

There is hope for us. Several studies suggest that specific “interventions” (now I have your attention again) can improve compliance and speed recovery. A key component of these interventions is a protocol driven team concept and the involvement of physician-extend-ers. Spending an average of nine hours per patient per year, nurse management of post-infarction risk reduction care resulted in significant improvements in smoking cessation, lipid values and activity levels compared to “usual care” [3]. Relatively inexpensive psychological counseling and group therapy can have important effects on the patient’s and their family’s recovery [4]. Simple follow up reminders to the primary care physician can have great effect: at two years 73% of post C ICU patients whose provider was prompted were receiving statins and 53% had achieved their LDL goal. In contrast, the control patients for whom no reminders were sent were receiving significantly less statin therapy (43%) and were less likely to be at their LDL goal (10%) [5].

Direct patient involvement in their own care is also effective. Dietician coaching of patients via phone calls resulted in significant lowering of LDL cholesterol compared with patients who did not receive coaching sessions [6]. Similar phone-based encouragement has been effective in increasing physical activity with an improvement in quality of life scores as well [7].

Interestingly, patients undergoing percutaneous coronary interventions are more likely to receive appropriate discharge medications than their non-intervened counterparts (odds ratio 1.48 for lipid lowering agents). Lest we get too cocky, the compliance rate was still too low in my estimation: only 54% [8]. Similarly, review of the “usual care” arms of randomized post-PCI studies show very poor attention to lipids. In the AVERT study, the post PCI patients achieved only an 18% reduction in LDL (to approx. 120 mg/dl) compared to a 46% reduction to a level of 77 mg/dl in the prescribed statin arm [9]. Two recent database reviews in the United States and Europe found a 50% reduction in mortality (over the first 6–12 months) in patients receiving statin therapy following PCI [10,11]. Clearly we need to be attentive to these simple, but powerful adjunctive measures.

In 1995 the AHA and ACC issued a consensus statement suggesting methods to achieve better compliance with known effective interventions [12]. Some managed care plans are achieving good results with comprehensive risk management systems administered by nurses and pharmacists [13]. Similar results can be achieved with a more comprehensive team approach (including cardiologists) in a tertiary care hospital [14]. Previously

in this column I have encouraged us to focus on the patient, on the lumens we treat, and on proper application of exciting new stent therapy. Our jobs are not done, however when we leave the cath lab. Many of our patients are first diagnosed when they visit us. We have an obligation to assist them as they adjust to living with coronary disease and to assist them in modifying their risk factors aggressively. After all, no stent has ever reduced mortality by 50% in the first year following PCI as statins can.

Sidney Smith, M.D. wrote these words five years ago: “We currently stand at a crossroads in the management of cardiovascular disease ... we have underutilized vital opportunities to prevent the very outcomes that we treat with (interventional procedures). The challenge is to broaden our focus so that risk reduction becomes an integral part of routine care [15].” Sadly, we are stalled at the crossroad. Will we still be there in 2008?

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