Summary

With the aging of the population, the incidence of both prostate carcinoma (PCa) and atrial fibrillation (AF) has increased. Options for “curative therapy” of PCa now include surgery, external beam radiation (EBT), and radioactive seed implantation (RSI). The latter two approaches, especially EBT, can produce radiation proctitis (RP) with rectal bleeding (RB). This poses an issue for anticoagulating the elderly AF patient who develops PCa. The attached case report of a 77 year old male who was treated with a combination of RSI and “low dose” EBT followed by recurrent severe rectal bleeding demonstrates the significance of this problem. In the AF patient with a CHADS2 score of 2 or more, and hence an indication for chronic warfarin therapy, the therapy of subsequently detected PCa requires careful consideration of the risks associated with its therapeutic options.

With the aging of the population, the incidence of both prostatic carcinoma (PCa) and atrial fibrillation (AF) has increased. Options for “curative therapy” of PCa have also increased, now including surgery, external beam radiation (EBT), and radioactive seed implantation (RSI). The latter two approaches, especially EBT, in our experience, can produce radiation proctitis with rectal bleeding (as well, less often, as bladder and urethral alterations with urinary bleeding). This poses an issue for anticoagulating patients suffering from both PCa and AF with a high-risk thromboembolic profile (e.g., a CHADS2 score of two or more, many of whom are elderly and in the same age range as those patients who develop PCa). The following case illustrates this difficulty now being encountered with increasing frequency.

The patient is a 77 year old male with rate-controlled paroxysmal and intermittently persistent AF, now s/p two DC cardioversions, whose episodes have been satisfactorily reduced on antiarrhythmic drug therapy. He also has a history of drug-treated hypertension, hyperlipidemia, and hyperglycemia; one prior acute coronary syndrome treated five years ago with drug eluting stents and aspirin and clopidogrel; and ACE-inhibitor/beta blocker treated LV dysfunction. His most recent LVEF on therapy was 38%. He has been anticoagulated with warfarin. He visited a urologist a year ago for PCa and was subsequently treated with RSI and “low dose” EBT following consultation with his internist but not his cardiologist. Since then the patient has suffered multiple episodes of rectal bleeding from confirmed radiation proctitis; so far, three have required multiple (up to 4) transfusions. Warfarin, aspirin, and clopidogrel have been discontinued for up to three weeks five times because of his rectal
bleeding.

This patient, by CHADS2 score is at high risk for AF-associated emboli in warfarin’s absence (age, hypertension, hyperglycemia, LV dysfunction) but is unable to remain on it due to the radiation-chosen therapy for his PCa. The patient may also be at risk for occlusion of his drug-eluting stents in association with the holding of his aspirin and clopidogrel during his periods of rectal bleeding. Radical prostatectomy with or without drug therapy would have been preferable for this anticoagulation-requiring AF patient. While surgery would have meant temporary interruption of his warfarin and platelet-inhibiting regimen, this would have been transient (days) and could have been bridged with heparin. In contrast, the radiation therapy chosen in lieu of a surgical approach has left him with both recurrent transfusion-requiring rectal bleeding and at risk for both AF-associated thromboembolism and occlusion of his coronary artery stents.

This patient represents a now common coexistence of diseases (AF and PCa) and the risk imposed by their concomitant therapeutic options. Insufficient awareness of the possible consequences of the radiation therapies for PCa by cardiologists and the anticoagulant requirements of the elderly AF patient by urologists and radiotherapists led to the adverse outcome in this patient, and, by extrapolation, likely in many others as well. Education of our colleagues such that these issues are recognized and considered in advance of any applied therapeutic intervention is clearly needed. Over the long-term, surgical therapy for PCa would appear to have a safer profile for the anticoagulant-requiring AF patient than does RSI or EBT.