TABLE 7e-4 CHECKLIST FOR MEN UNDERGOING ANDROGEN DEPRIVATION THERAPY (ADT)

1. Weigh the risks and benefits of ADT and whether intermittent ADT is a feasible and safe option.
2. Perform a baseline assessment including fasting glucose, plasma lipids, blood pressure, bone mineral density, and FRAX® score.
3. Optimize calcium and vitamin D intake, encourage structured physical activity and exercise, and consider pharmacologic therapy in men with a previous minimal trauma fracture and those with a 10-year risk of a major osteoporotic fracture >20%, unless contraindicated.
4. Monitor body weight, fasting glucose, plasma lipids, blood pressure, and bone mineral density, and encourage smoking cessation and physical activity.
5. In men who are receiving ADT and who experience bothersome hot flushes, as indicated by sleep disturbance or interference with work or activities of daily living, consider initial therapy with venlafaxine. If in effective, add medroxyprogesterone acetate.
6. In men who experience painful breast enlargement, consider therapy with an estrogen receptor antagonist, such as tamoxifen.

agonists in men with prostate cancer is associated with rapid induction of insulin resistance, hyperinsulinemia, and a significant increase in the risk of incident diabetes. Metabolic syndrome is prevalent in over 50% of men undergoing long-term ADT. Some but not all studies have reported an increased risk of cardiovascular events, death due to cardiovascular events, and peripheral vascular disease in men undergoing ADT. Men receiving ADT are also at increased risk of thromboembolic events. The rates of acute kidney injury are higher in men currently receiving ADT than in men not receiving ADT; the increased risk appears to be particularly associated with the use of combined regimens of a GnRH agonist plus an antiandrogen. ADT also is associated with substantially increased risk of osteoporosis and bone fractures.

APPROACH TO THE PATIENT: Men Receiving ADT

The benefits of ADT in treating nonmetastatic prostate cancer should be carefully weighed against the risks of ADT-induced adverse events (Table 7e-4). If ADT is medically indicated, consider whether intermittent ADT is a feasible option. Men being considered for ADT should undergo assessment of cardiovascular, diabetes, and fracture risk; this assessment may include measurement of blood glucose, plasma lipids, and bone mineral density (BMD) by dual-energy x-ray absorptiometry. Institute measures to prevent bone loss, including physical activity, adequate calcium and vitamin D intake, and pharmacologic therapy in men with a previous minimal trauma fracture and those with a 10-year risk of a major osteoporotic fracture >20%, unless contraindicated. Men with prostate cancer who are receiving ADT should be monitored for weight gain and diabetes. Encourage lifestyle interventions, including physical activity and exercise, and attention to weight, blood pressure, lipid profile, blood glucose, and smoking cessation, to reduce the risk of cardiometabolic complications. In randomized trials, medroxyprogesterone, cyproterone acetate, and the selective serotonin reuptake inhibitor venlafaxine have been shown to be more efficacious than placebo in alleviating hot flushes. The side effects of these medications, including increased appetite and weight gain with medroxyprogesterone, gynecomastia with estrogenic compounds, and dry mouth with venlafaxine, should be weighed against their relative efficacy. Acupuncture, soy products, vitamin E, and herbal medicines have been used empirically for the treatment of vasomotor symptoms without clear evidence of efficacy. Gynecomastia can be prevented by local radiation therapy or the use of an antiestrogen or an aromatase inhibitor; these therapies are effective in alleviating pain and tenderness but are less effective in reducing established gynecomastia.