

cases of hepatotoxicity being fatal.^{2,3} The deaths seem to be the result of idiosyncratically severe reactions.⁴ Since it is not clear that a low dosage will prevent these deaths, it seems advisable not to use flutamide for benign disorders.⁵

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Cost-Effectiveness of Cervical-Cancer Screening in Developing Countries

TO THE EDITOR: The study by the Alliance for Cervical Cancer Prevention Cost Working Group, reported by Goldie et al. (Nov. 17 issue),¹ is biased against cytologic screening. Costs for cytologic tests are overestimated. Costs for human papillomavirus (HPV) tests are underestimated. Single-visit cytologic screening² is not considered. The Alliance was awarded a \$50-million gift from the Bill and Melinda Gates Foundation on the assumption that noncytologic screening tests constitute the most likely solution to the problem of cervical cancer in developing countries.³ This assumption constitutes a potential source of bias against cytology that should be disclosed. Similarly, the partnership between the Program for Appropriate Technology in Health, a study cosponsor, and Digene,⁴ which markets HPV tests, should be disclosed.

Screening tests for cervical cancer are appropriately characterized as complementary, rather than competitive. Without cytology to triage HPV tests or visual primary screening tests, referral rates for colposcopy are unsustainable.⁵ Unlike single-visit cytologic screening,² single-visit visual screening and HPV screening require the administration of ablative treatment before the possibility of invasive carcinoma has been excluded, which necessitates considerable psychological morbidity.⁵

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THE AUTHOR REPLIES: Our cost estimates are based on primary data collected independently in five countries with various socioeconomic profiles. Estimates reflect the costs of the transport of laboratory equipment and specimens, training, administration, and other programmatic activities, as well as the full range of direct and indirect medical costs associated with diagnosis and treatment. Additional differences between our methods and others have been described previously.¹

Clinical-trial outcomes that were associated

with cytologic screening and same-day treatment that bypassed colposcopy and biopsy were published after our article was in press. Our study was conducted in the United States in a clinical-practice setting in close proximity to a laboratory with access to courier service. We are in agreement with Dr. Suba and colleagues that a strategy of one-visit cytologic screenings might be assessed for highly selected settings.

In our report, we discussed the consequences associated with overtreatment of patients with false positive results and inadequate treatment of advanced cervical intraepithelial neoplasia or early cancer, but these risks are relatively small, as compared with the lifetime risk of cervical cancer. All studies by the Alliance for Cervical Cancer Prevention have been approved after undergoing ethics review by institutions based either in the United States or in Europe and by in-country academic and government ethics review

boards. Programs using the single-visit approach are considered safe and acceptable by the American College of Obstetricians and Gynecologists.²

In the past three decades, cytologic screening for cervical cancer has been available, and yet more than 6 million women have died of this disease. We encourage all efforts to accelerate the implementation of sustainable, cost-effective strategies to reduce mortality from a preventable cancer that disproportionately affects the poorest women in the world.

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Living-Donor Liver Transplantation for Chronic Hepatic Graft-versus-Host Disease

TO THE EDITOR: In 2002, a four-year-old boy who had been diagnosed with acute lymphoblastic leukemia in 1999 received a bone marrow transplant from his mother, who had three HLA-antigen mismatches and an incompatible blood type. After engraftment, an erythematous rash, diarrhea, and hepatomegaly, accompanied by elevated liver-enzyme levels, developed in the boy. The findings were indicative of acute graft-versus-host disease (GVHD) and led to intensified immunosuppressive therapy with mycophenolate mofetil and corticosteroids. Although the gut and skin GVHD improved, the hepatic GVHD persisted and was confirmed as chronic hepatic GVHD on liver biopsy (Fig. 1A and 1B). The chronic GVHD was managed with low-dose corticosteroids, because of persistent hyperbilirubinemia, elevated liver-enzyme levels, thrombocytopenia, and coagulopathy. After transplantation, the patient showed complete engraftment of the transplanted bone marrow (99 percent). Bone marrow biopsy and other investigations showed no evidence of the relapse of leukemia. In March 2005, the boy underwent living-donor liver transplantation from

his mother, because no other donor candidate was available.¹ The left-lobe graft weighed 270 g, and the graft-to-recipient weight ratio was 1.0 percent. Both the portal vein and hepatic artery of the graft were flushed with muromonab-CD3 (Orthoclone OKT3, Ortho Pharmaceutical) that was contained in a histidine-tryptophan-ketoglutarate solution to wash out and eliminate donor lymphocytes. Histopathological examination of the boy's explanted liver revealed the presence of ductopenia with foam-cell arteriopathy, which was consistent with chronic hepatic GVHD (Fig. 1C and 1D).

Postoperative immunosuppression consisted of low-dose tacrolimus and corticosteroids to prevent GVHD. The patient was discharged on postoperative day 31 without complications. Protocol liver biopsy on postoperative day 60 revealed no evidence of rejection or GVHD (Fig. 1E). During eight months of follow-up, the patient has been doing well with normal liver function.

GVHD, a major cause of liver dysfunction after bone marrow transplantation, occurs in 60 to 80 percent of patients when marrow from a partially

CORRECTION

Cost-Effectiveness of Cervical-Cancer Screening in Developing Countries

Cost-Effectiveness of Cervical-Cancer Screening in Developing Countries . In the letter by Goldie, on page 1536, lines 3 through 6 should have read, "The study that Dr. Suba refers to was conducted in the United States in a clinical-practice setting in close proximity to a laboratory with access to courier service," rather than "Our study was conducted . . . ," as printed. We regret the error.