1. Hesketh T. Getting married in China: pass the medical first. BMJ 2003;326:277-9.
2. Hesketh T, Tang F, Wang ZB, et al. HIV and syphilis in young Chinese adults: implications for spread. Int J STD AIDS 2005; 16:262-6.

THE AUTHORS REPLY: Wu and Zhou suggest that some portion of the increase in reported syphilis cases in China may be an artifact of a one-time change in the reporting system in 2004 — an important concern. However, a systematic review of Chinese and English peer-reviewed publications about syphilis trends among both high-risk groups and pregnant women in China suggests that syphilis was spreading before 2004.[1] After 2004, we would expect that Web-based reporting would provide a realistic account, consistent with Web-based reporting in other contexts.[2] Studies have shown a wide variation in syphilis risk among the approximately 20 million children born in China each year,[3,4] making inferences from the sentinel surveillance data to the national situation challenging. The spread of syphilis among men who have sex with men and among nulliparous women who have sex for money could still ultimately affect the occurrence of congenital syphilis. As Wu and Zhou note, accurate diagnosis of congenital syphilis is difficult, but this challenge should not obscure the importance of preventing syphilis and its adverse outcomes in pregnant women.

Hesketh and colleagues bring up an excellent point about reexpanding syphilis screening in China — a strategy that is consistent with the strategy proposed by our research group.[3] At the same time, concerns about the feasibility of reinstitutionalizing mandatory premarital syphilis testing at the national level in China are not trivial and demand further investigation. The consensus that China has an expanding syphilis epidemic has already served as a call for action that has been enthusiastically answered by public health leadership at multiple levels in China. The Chinese Ministry of Health has already issued a 10-year plan for national syphilis control and prevention. A pilot program of antenatal syphilis screening in Shenzhen, Guangdong Province, screened more than half a million women and showed the feasibility and cost-effectiveness of such programs,[5] and now many antenatal clinics routinely provide free syphilis testing there.

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1. Lin CC, Gao X, Chen XS, Chen Q, Cohen MS. China's syphilis epidemic: a systematic review of seroprevalence studies. Sex Transm Dis 2006;33:726-36.
2. Nash D, Elul B, Rabkin M, et al. Strategies for more effective monitoring and evaluation systems in HIV programmatic scale-up in resource-limited settings: implications for health systems strengthening. J Acquir Immune Defic Syndr 2009;52:Suppl 1: S58-S62.
3. Tucker JD, Hawkes SJ, Yin YP, Peeling RW, Cohen MS, Chen XS. Scaling up syphilis screening in China: implementation beyond the clinic. Bull World Health Organ 2010;88:452-7.
4. Zhu L, Qin M, Du L, Xie RH, Wong T, Wen SW. Maternal and congenital syphilis in Shanghai, China, 2002 to 2006. Int J Infect Dis 2010 February 6 (Epub ahead of print).
5. Hong FC, Liu JB, Feng TJ, et al. Congenital syphilis: an economic evaluation of a prevention program in China. Sex Transm Dis 2010;37:26-31.

Retinal Injuries from a Handheld Laser Pointer

TO THE EDITOR: Handheld laser pointers are commonly used in lecture halls and are considered to be harmless and safe.[1] However, laser pointers can cause severe eye injury, as demonstrated by the case of a 15-year-old boy. The boy had ordered a handheld laser pointer with green light on the Internet to use as a toy for popping balloons from a distance and burning holes into paper cards and his sister's sneakers. The boy's life changed when he was playing with his laser pointer in front of a mirror to create a "laser show," during which the laser beam hit his eyes several times. He noticed immediate blurred vision in both of his eyes. Hoping that the visual loss would be transient and afraid of telling his parents, he waited 2 weeks before seeking an ophthalmic assessment, when he could no longer disguise his bad vision. His visual acuity was so poor in his left eye that he was only able to count fingers at a distance of 3 ft, and it was 20/50 in his right eye. A funduscopic examination revealed a dense subretinal hemorrhage in his left macula

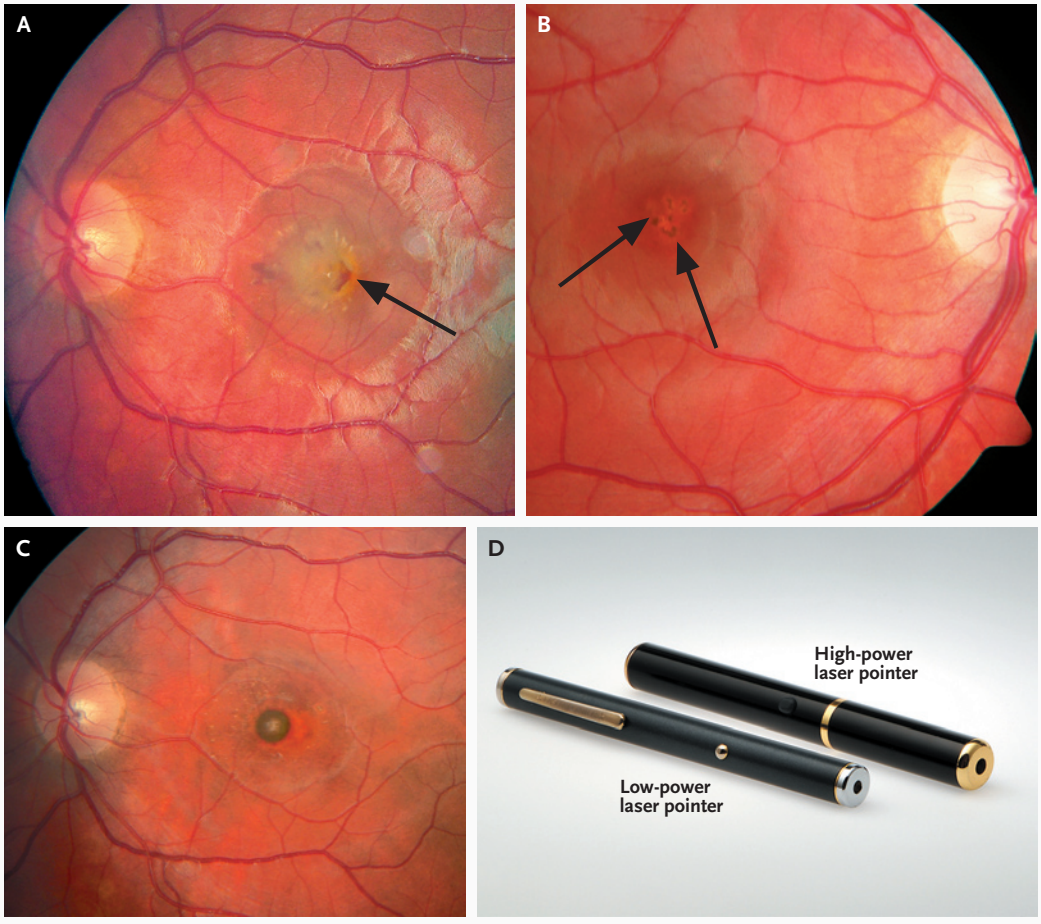

Figure 1. Retinal Injury in a Teenage Boy and Laser Pointers.

A photograph of the fundus of the left eye (Panel A) shows central subretinal hemorrhage (arrow) and retinal edema, suggesting a break in Bruch's membrane caused by a disruptive laser burn. A photograph of the fundus of the right eye (Panel B) shows several hyperpigmented areas in the foveolar region (arrows). These findings are consistent with scars in the pigment epithelium as a result of a thermal laser injury. A photograph of the fundus of the left eye after 4 months (Panel C) shows a remaining hyperpigmented scar just beside the center of the fovea. In Panel D, the hazardous laser pointer is quite similar to a harmless low-power device.

(Fig. 1A) and several tiny round scars in the pigment epithelium of the foveolar region of his right eye (Fig. 1B). The clinical findings were consistent with severe bilateral retinal laser injury.[1] After 4 months, the boy's visual function remained impaired but improved to 20/32 in the right eye spontaneously and to 20/25 with a remaining scar just beside the center of the fovea in the left eye after one intravitreal injection of ranibizumab (Fig. 1C).

In the past, laser pointers sold to the public had a maximal output of 5 mW, which is regarded as harmless because the human eye protects itself with blink reflexes.[2] The measured output of the laser in this case was 150 mW. The use of lasers that are threatening to the eye is normally restricted to occupational and military environments; laser accidents outside these fields are very rare.[3] However, powerful laser devices, with a power of up to 700 mW, are now easily obtainable through the Internet, despite government restrictions.[4] These high-power lasers are advertised as "laser pointers" and look identical to low-power pointers (Fig. 1D). The much higher power of such devices may produce immediate, severe retinal injury. Despite their potential to

cause blinding, such lasers are advertised as fun toys and seem to be popular with teenagers.[5] In addition, Web sites now offer laser swords and other gadgets that use high-power lasers.

Neither the owners nor the potential victims of such dangerous "toys" can distinguish harmless laser pointers from hazardous ones, and we may see more such eye injuries in the near future.

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1. Mainster MA, Stuck BE, Brown J Jr. Assessment of alleged retinal laser injuries. Arch Ophthalmol 2004;122:1210-7.
2. Ajudua S, Mello MJ. Shedding some light on laser pointer eye injuries. Pediatr Emerg Care 2007;23:669-72.
3. Barkana Y, Belkin M. Laser eye injuries. Surv Ophthalmol 2000;44:459-78.
4. Consumer health information: illuminating the hazards of powerful laser products. Silver Spring, MD: Food and Drug Administration, 2009. (Accessed July 14, 2010, at http://www.fda.gov/downloads/ForConsumers/ConsumerUpdates/UCM167564.pdf.)
5. Ziahosseini K, Doris JP, Turner GS. Laser eye injuries: maculopathy from handheld green diode laser pointer. BMJ 2010;340:1261.

Kidney Paired Donation in Live-Donor Kidney Transplantation

TO THE EDITOR: An estimated 6000 patients on the waiting list for kidney transplantation in the United States have suitable living donors who are not immunologically compatible.[1] Both kidney paired donation (KPD) and desensitization are options for patients with incompatible donors. KPD, which matches a living donor with a compatible recipient in a tag-team approach among potential donor–recipient pairs, can achieve compatible transplant combinations. Although desensitization therapies have been used to achieve transplantation from an incompatible donor, such procedures are costly and may have associated complications and inferior long-term outcomes.[2,3] Computer modeling suggests that KPD is underused despite lower costs and better outcomes than desensitization.[4,5]

Our center established a KPD program enrolling all consenting recipient candidates who had incompatible donors as well as compatible pairs with donors over the age of 45 years. Since we initiated the program in March 2008, we have performed 83 KPD procedures, including 22 two-way and 13 three-way exchanges. The median time from listing in the KPD database to transplantation was 5.5 months (range, 1 to 18). All recipients had negative flow cross-matches at the time of transplantation. Of the transplant recipients in the program, 64% had cross-match incompatibility with their original donors, and 36% had blood-type incompatibility. Of the transplant recipients with cross-match incompatibility, 36% had a panel reactive antibody of more than 80%. With a median follow-up of 6 months after transplantation, there were no episodes of cellular rejection and one mild antibody-mediated rejection that was easily reversed.

Currently, 201 recipient candidates and 339 potential donors are enrolled in the KPD database. There was a strong correlation between the number of KPD transplantations and the addition of new pairs to the database, with the sharpest rise occurring after the database reached 100 recipient candidates (Fig. 1). This increase in the number of KPD procedures has substantially increased access to live-donor transplantation. One year after initiation of the program, KPD procedures accounted for 11% of live-donor transplantations at our center; by 18 months, the proportion was 31%. In the past year, 61 of 180 (34%) live-donor kidney transplantations that were performed at our center were KPD procedures, a proportion that highlights the sustainability of KPD to increase access to transplantation.

If the productivity of our KPD program were to be replicated on a national level, it would potentially result in approximately 2000 additional live-donor transplantations annually and reduce the number of patients on the waiting list. The increased use of this procedure would also probably avert many difficult desensitization therapies. No recent advance in transplantation has achieved such an apparent increase in access to live-donor transplantation, especially in sensitized patients.