A novel approach to preserve eyes in Retinoblastoma (*Ophthalmology. Published online March 14, 2008*)

A new approach to the treatment of retinoblastoma, which involves the administration of chemotherapy directly into the ophthalmic artery, can save children from having an eye removed, and in some cases can save vision. The new technique involves delivering the chemotherapeutic drug melphalan through a catheter inserted at the groin, which travels up to the carotid artery and then on to the ophthalmic artery before reaching the retina. The procedure is carried on an outpatient basis under general anesthesia. Results from 18 patients showed 2 treatment failures, but 16 patients had their tumor "cured" and 14 kept their eye (75%). In 2 cases, the eye was removed because it was already badly damaged, but pathology showed that there was no tumor remaining. Of the 14 eyes that were saved, 9 had vision (50%), and in 4 of these cases the vision improved. The other 5 eyes had no vision, but even this is a good result. There were no adverse effects, such as infection or neutropenia, which occur with conventional chemotherapy.

COMMENTS The loss of an eye in a child is probably one of the most traumatic consequences of retinoblastoma. This technique will bring hope to countless children, and it goes to show that modern medicine will benefit with increased interactions between different superspecialities, like an interventional radiologist, pediatric oncologist, and ophthalmologist in this situation.

And now, once daily Amoxycillin (*Arch Dis Child. Published online March 12, 2008*)

From 1996 to 1998, a total of 353 children presenting with culture proven GABHS pharyngitis were randomized to receive oral amoxicillin 1500 mg once daily (or 750 mg if body weight was <30 kg) or oral penicillin V 500 mg twice daily (or 250 mg if body weight was <20 kg) for 10 days. As a surrogate microbiologic endpoint for primary prevention of acute rheumatic fever, the main endpoint in this study was eradication of GABHS, based on follow-up throat cultures on days 3 to 6, 12 to 16, and 26 to 36, with use of serotyping of GABHS isolates to differentiate bacteriologic treatment failures and relapses from new acquisitions. More than 90% of children had eradication of GABHS within 3 to 6 days of starting treatment. Based on these findings, the authors concluded that once-daily oral amoxicillin was not inferior to twice-daily penicillin V to treat and eradicate GABHS in children with pharyngitis. The once-daily dosing schedule of amoxicillin should improve compliance, and other advantages include cost, availability, and reasonably narrow antibacterial spectrum.

COMMENTS Amoxycillin has come a long way from being a drug being initially prescribed 3-4 times daily, to present day, when it seems that it may work for GABHS pharyngitis, even in an OD dosage. Of course, whether this can be extended to other indications of amoxicillin remains to be seen.

Administration of steroids in viral URI in children with nephrotic syndrome reduces chances of relapse (*Arch Dis Child 2008; 93: 226*)

In children with steroid-dependent nephrotic syndrome, increasing the dose of prednisolone during viral upper respiratory tract infections (URTI) can reduce the risk of relapse. The researchers studied 40 children in Sri Lanka with nephrotic syndrome who were receiving maintenance therapy with less than 0.6 mg/kg of prednisolone on alternative days. At the first sign of a presumed viral URTI, the children were randomly allocated to 5 mg of prednisolone or placebo to be taken on the days scheduled for no treatment. Thus, they received 7 consecutive days of prednisolone or continued with their usual treatment. On the emergence of a second viral URTI, the patients crossed over. The relapse rate was 19/40 (48%) in the placebo group and 7/40 (18%) in the prednisolone group. Given the significant reduction in the rate of relapses triggered by the infections, the

researchers conclude that the approach potentially reduces the need for high-dose glucocorticoid therapy and cytotoxic therapy with their associated side effects.

COMMENTS Steroid dependant nephrotic syndrome can be a tough challenge, and any modality that reduces the frequency of relapses with its associated complications, are welcome. However risk of increasing steroid toxicity, and possible immune suppression as a result of recurrent courses of daily steroid therapy, are something that may need to be addressed in a larger study.

Gaurav Gupta,
Senior Consultant, Pediatrics,
Fortis Hospital and Charak Clinics,
Mohali,
India.
E-mail: drgaurav@charakclinics.com