We feel that a significant number of patients with focal glomerulosclerosis with considerably less than 20% involvement may progress to renal failure. It is important to examine as many glomeruli as possible and this can best be accomplished by examination of serial sections of two cores of tissue.

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Reply

To the Editor:

The report by Kohaut, Singer, and Hill[1] claims to be in general agreement with our studies. Their major point of disagreement is that the quantitative cut-off point at which the sclerotic lesions can predict outcome should be much lower than 20%. Another study[2] claims that 11 of 13 patients who progressed to end-stage renal failure had 30% or more glomeruli affected with focal and segmental sclerosis at the time of initial biopsy, which is not dissimilar to our figure of 20%. However, we do not discount the possibility that a lower percent involvement may correlate with prognosis.

The median time from onset of the nephrotic syndrome to renal biopsy was 3.5 months in our group of patients, whereas no data are given for the patients studied by Kohaut et al. Moreover, despite the longer period of follow-up reported by the above authors, the clinical data are very incomplete, and tend to invalidate any prognostic statements. It is impossible to determine from their data the number of patients with purely minimal changes, those having only focal glomerular obsolescence, those with focal segmental sclerosis or hyalinosis, or those with a combination of these lesions. Therefore, the two studies are not comparable.

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Bacteria-mediated cyanide toxicity after laetrile enemas

To the Editor:

A case of nearly fatal cyanide toxicity following a laetrile enema to a child was attributed by Ortega and Creek[1] to the hydrolysis of laetrile by β-glucosidase of the intestinal mucosa. Experiments we have conducted in rats show that a significant release of cyanide from amygdalin (laetrile)[2] requires the presence of the intestinal microflora. Conventional Sprague-Dawley rats become progressively lethargic and experience respiratory difficulty, convulsions, and death within 2 to 5 hours after oral administration of amygdalin (600 mg/kg). These animals have cyanide (CN^-) blood concentrations of between 0.3 and 0.5 mg/dl just prior to death. Germ-free rats, on the other hand, display no signs of toxicity even when the dose is twice that administered to conventional rats. In the germ-free rats, blood cyanide concentrations remain below 0.04 mg/dl following the administration of amygdalin.

The 3.5 gm of laetrile administered in the enema yielded a dose on a weight basis of approximately half of that given in our rat studies, but the rectal route of administration probably provided more direct contact of the cyanide-containing compound with the intestinal flora. These experiments showing an obligatory role for the microflora in the release of cyanide from laetrile explain the apparently unexpected severe cyanide toxicity that was found after the administration of laetrile by the rectal route.

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