correlated to hypoactivity in DMSA scanning in patients with advanced renal scarring. Based on this finding, we performed an experimental study to evaluate the effect of vitamin A supplementation on renal scar formation after pyelonephritis in rats, and found that vitamin A prevented renal scarring or decreased its severity [7]. We attributed this beneficial effect of vitamin A either to its anti-infective properties, or to its role on epithelization of renal tissue, or to both.

Next, we devised another experimental model to determine whether vitamin A was effective in preventing tissue injury in the presence of a non-inflammatory renal pathology. For this purpose, we used a renal ablation nephropathy (subtotal nephrectomy) model in rats. Although not equally impressive, a given dose of vitamin A was found to decrease the glomerular and tubular injury scores in this model of nephropathy [8]. We look forward to seeing the results of the study which is being carried out at present by Jocks et al. [2] involving unilateral ureteral obstruction and subtotal nephrectomy models.

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Vitamin A in the treatment of renal disease

Sir,

The association of vitamin A with the urinary system was first noticed early in the twentieth century [1]. However, retinoids have only recently gained attention as potential therapeutic agents in renal disease. With this background, we read Wagner’s article entitled ‘Potential role of retinoids in the therapy of renal disease’ with great interest [2]. As he pointed out, the role of retinoids in renal development has been evaluated extensively [3]. On the other hand, there have been few studies of vitamin A deficiency and urinary tract infections (UTI) until recently [1,4,5].

In a clinical study, we evaluated the effect of serum vitamin A and β-carotene levels on the extent of renal scarring in children with recurrent UTI [6]. The results of that study showed that serum level of vitamin A was inversely