

found that there was a definite possible ideological association between the onset of overactive bladder and nutrient composition of the diet. Specifically, they found that higher intakes of potassium, protein, and vitamin E were significantly associated with a decreased risk of onset of OAB. In addition, vitamin B6, niacin and retinol intake had an association that was approaching but not quite establishing statistical significance.

With the aging population and the increased incidence of overactive bladder, research such as this is extremely valuable for its potentially cost effective prophylaxis against the onset of this malady. The value of vitamin D and its association with exposure to light gives a measure of scientific support to the common feeling that fresh air and sunlight does have the potential to be restorative to good health. Though the questionnaire was validated to a certain population it would be of genuine interest to have similar questionnaire addressed to other populations which show a strong degree of genetic similarity whether it be in Europe, Asia or Africa. With patients continually pressing physicians for a holistic pathway to retain good health and stave off the common maladies associated with aging, this paper makes for valuable reading to give advice on same.

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PEDIATRIC UROLOGY

Late renal functional and morphological evaluation after non-operative treatment of high-grade renal injuries in children

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Objective: To assess the long-term results in children with high-grade renal trauma who were managed without surgery, as such treatment was initially successful but little is known about the late ipsilateral renal function and morphology.

Patients and Methods: The study included 13 children (nine boys and four girls; mean age 8 years, sd 5) with high-grade renal injury who were managed without surgery between 1997 and 2001, and followed for a mean (sd, range) of 3 (2, 0.5-7) years. The trauma was caused by a motor-car accident in five and falling from a height in eight children, and was on the right in 10 and on the left in three. There was gross and microscopic haematuria in 10 and three patients, respectively. The trauma was graded according to the American Association for Surgery of Trauma, with grades III, IV and V renal injury in six, four and three children, respectively. All patients were treated initially by observation; one required super-selective embolization because of continuing haemorrhage. Three children with progressive urinary extravasation were treated with a percutaneous tube drain and JJ stent for 6 weeks. Patients were discharged after a mean (sd) hospital stay of 9 (6) days. Ultrasonography then showed resolving haematoma in all patients with a mean (sd) size of 7 (2) cm (2). At the last follow-up patients were re-evaluated by a clinical examination, renal scintigraphy and computed tomography angiography.

Results: None of the children was hypertensive nor had any abnormality on urine analysis; all had normal serum creatinine levels, and scintigraphy and angiography showed normal contralateral kidneys in all. Ipsilateral abnormalities were detected in 12 patients, and included a single scar in five, multiple scars in six

and a cystic lesion with multiple septa in one. There was no vascular complication or hydronephrosis, and no significant functional loss, with all affected kidneys having a split function of 41-50% at the last follow-up.

Conclusion: Although there is no late functional loss there are residual morphological changes in almost all children with high-grade renal injury. This study provides objective support for the non-operative management of high-grade renal injury in children, but a prolonged follow-up is warranted to assess the risk of progression of these abnormalities.

Editorial Comment

The authors demonstrate the remarkable results of “non-operative” management of severe renal trauma. Of 6 patients with Grade III, 4 with Grade IV and 3 with Grade V injuries, none required open surgery and despite some morphological abnormalities, none had significant functional loss.

Their data however should be interpreted with some caution however. Seven patients required blood transfusion, one had an arterial embolization and 3 had percutaneous flank drains and internal stent placement. In other words, “non-operative” management has some morbidity and may require procedures. Moreover, this is a select population. No patient in this series had other abdominal injuries, as those patients are managed at a different center. Hence there is a significant selection bias in this series. This leaves unresolved, the question of whether operative intervention may be indicated in patients being operated on for other abdominal injuries. Nonetheless, the authors do demonstrate that impressive results can be obtained in children with major injuries who are managed expectantly.

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Desmopressin for the treatment of nocturnal bedwetting in patients with neural tube closure defects

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Purpose: We evaluated desmopressin (DDAVP) treatment in patients with neuropathic bladder secondary to neural tube closure defects (NTDs) and nocturnal incontinence.

Materials and Methods: We selected 25 patients, that is 10 males (40%) and 15 females (60%), between ages 7 and 16 years (mean 9.8) with neuropathic bladder secondary to NTDs without a ventricular-peritoneal shunt. All had a low pressure bladder and presented with daytime continence between catheterizations but had persistent nocturnal urine loss 7 nights weekly. They underwent treatment with oral DDAVP according to a certain design, namely an initial dose of 0.2 mg for 3 weeks, which was increased to 0.3 or 0.4 mg for another 3 weeks in non responders. The average dose was 0.2 mg. At the effective minimal dose (bedwetting decrease greater than 50%) patients continued for 6 months and then decreased by intervals of 0.05 mg every 2 weeks. In the event of recurrence treatment continued for 1 year.

Results: All patients responded to treatment during the nighttime hours except 1 who suspended treatment after 4 weeks. There were no adverse effects from DDAVP.

Conclusions: Treating nocturnal bedwetting with DDAVP in patients with NTDs was effective and safe. Nevertheless, to our knowledge treatment duration has not yet been determined.

Editorial Comment

The authors study nocturnal enuresis in a select group of children with neurogenic bladder dysfunction. They note that although bladder management in these patients often makes these patients dry during the day, many are wet at night. In this small study, 24 of 25 patients responded to DDAVP by becoming dry at night. There were no complications.

Although this is a creative approach and likely to lead to quality of life improvement in these patients, there are some concerns. First, the authors acknowledge that this is a selected group of patients. However, they do not give the criteria for selection, except for the exclusion of those with a ventriculoperitoneal shunt. Why were these excluded, since they make up the majority of the population of children with neurogenic bladder dysfunction? Moreover, the authors monitored daily weights and electrolytes in the beginning of the study, but provide no data on the results. How did they counsel the patients regarding drinking? Were they placed on evening fluid restriction? If so, might this negatively affect quality of life? Overall, this is a creative and interesting preliminary study of an interesting problem that warrants further examination.

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