

be overdiagnosed in patients with SUI who misinterpret their fear of leaking (because of SUI) for urge incontinence. *Neurourol. Urodynam.* 27:376-378, 2008. (c) 2008 Wiley-Liss, Inc.

Editorial Comment

A straightforward report from leaders in the field comparing the urodynamic characteristics and variables of patients suffering from stress urinary incontinence combined with urinary urge incontinence versus those plagued with urinary urge incontinence alone. The authors started with 100 patients in the study population then parsed the group down to a total of 72 patients: 45 patients with mixed urinary incontinence versus 27 patients with urinary urge incontinence alone (patients were excluded from the original 100 if they had a neurogenic bladder, urinary fistula, urethral diverticulum, prior urologic surgery, or known infravesical outlet obstruction). The patient's overactive bladder was classified by the criteria of Flisser et al. (1). Significant differences were noted upon analysis with regards to the presence of absence of detrusor overactivity, episodes of urinary incontinence for 24 hour period, voiding pressure, functional bladder capacity, as well as severity of urinary incontinence on a 24 hour pad test.

A well written paper with an excellent discussion on urinary urge incontinence in patients with and without stress urinary incontinence. The presentation does raise an excellent point with regards to the presence of urinary urge incontinence in patients classified with mixed urinary incontinence: are these patients really suffering from urge episode or do they just void often to minimize bladder volume and potential leakage episodes? This paper is an appropriate companion to the other reviewed article in this month's journal to engender thought on urinary urge incontinence and its role in anti-incontinence surgery success rates.

Reference

1. Flisser AJ, Walmsley K, Blaivas JG: Urodynamic classification of patients with symptoms of overactive bladder. *J Urol.* 2003; 169: 529-33; discussion 533-4.

Steven P. Petrou, M.D

Associate Professor of Urology

Chief of Surgery, St. Luke's Hospital

Associate Dean, Mayo School of Graduate Medical Education

Jacksonville, Florida, USA

E-mail: petrou.steven@mayo.edu

PEDIATRIC UROLOGY

A long-term prospective analysis of pediatric unilateral inguinal hernias: should laparoscopy or anything else influence the management of the contralateral side?

Maddox MM, Smith DP

East Tennessee Children's Hospital, Knoxville, TN, USA

J Pediatr Urol. 2008; 4: 141-5

Purpose: To prospectively determine if children who present with a unilateral inguinal hernia can be identified as at risk for developing a metachronous inguinal hernia (MIH) based on risk factors and laparoscopic findings of the contralateral internal ring. Materials and Methods: Between April 2000 and October 2004, 299 patients with a unilateral inguinal hernia were followed prospectively. Laparoscopy was attempted in each child. Bilateral repair was only performed in those with contralateral swelling or crepitus during laparoscopic evalua-

tion. All other children were followed regardless of laparoscopic findings. Risk factors to include premature delivery, family history and increased abdominal pressure were recorded. Clinical follow up and annual phone interviews were performed to determine the development of a MIH.

Results: Thirteen patients underwent initial bilateral inguinal hernia repair. Of the remaining 286 patients (272 boys, 14 girls; ages 54 +/- 50.8 months), laparoscopy revealed 127 closed, 48 cleft and 67 open (contralateral patent processus vaginalis) contralateral internal rings, and in 44 laparoscopy was not possible due to a small hernia. Of 222 patients followed for 53.2 months (30.1-82.5 months), 15 (6.8%) developed a MIH. When comparing age, gender, laterality, laparoscopic findings, family history, premature birth and intra-abdominal pressure, only family history exhibited a significant risk for MIH (33% vs. 7.7%). However, 16/21 children with a family history never developed a MIH, and 47/53 children with a contralateral patent processus vaginalis have yet to develop one.

Conclusions: Risk factors and laparoscopic findings failed to predict the few children who would develop a MIH. The contralateral side should not be routinely explored by any methodology.

Editorial Comment

This manuscript studied the questions of whether laparoscopy or any other diagnostic treatment modality should be used to evaluate the contralateral inguinal canal for hernia development. These authors studied 299 patients prospectively over about 4 years and inguinal herniorrhaphies on the contralateral side were only performed if the child demonstrated an inguinal swelling or during laparoscopy palpable crepitations. The laparoscopic exam of the contralateral internal ring was divided into three categories: closed, cleft or open.

Thirteen of their initial patients underwent surgery at the same time on the contralateral groin because of inguinal swelling or crepitation at the time of laparoscopy. 23% of the patients had a contralateral patent processus vaginalis. 44% were closed and 17% had a cleft and 15% did not undergo laparoscopic evaluation because of technical issues. After 19 months, 9 patients (3.6%) had developed a contralateral inguinal hernia, and after a minimum of 30 months, 6 more children had developed an inguinal hernia on the opposite side for a 6.8% rate. There were no predictive factors in the history or physical exam that were helpful, except a positive family history.

In this study a contralateral patent processus vaginalis only predicted 11% of patients that went on to develop an inguinal hernia. The manuscript did not show any age factors as predictive indicators and this group of patients did not show a laterality difference. The authors conclude that the contralateral side should not routinely be explored by any method.

For years, what to do with the opposite inguinal canal when a clinical hernia is present has been studied and debated. This manuscript and references cited within it seem to suggest that there is no reason to explore an asymptomatic inguinal canal, nor is there a reason to look at it laparoscopically. With only a 7% metachronous hernia rate, many unnecessary procedures can be avoided.

Dr. Brent W. Snow

Division of Urology

University of Utah Health Sci Ctr

Salt Lake City, Utah, USA

E-mail: brent.snow@hsc.utah.edu

Ileal enterocystoplasty and B12 deficiency in pediatric patients

Rosenbaum DH, Cain MP, Kaefer M, Meldrum KK, King SJ, Misseri R, Rink RC

Division of Pediatric Urology, Riley Hospital for Children, Indianapolis, Indiana, USA

J Urol. 2008; 179: 1544-7; discussion 1547-8

Purpose: Vitamin B12 deficiency is a feared complication of enterocystoplasty but it has never been demonstrated in pediatric patients who have undergone ileal enterocystoplasty. We reviewed our series of more than 500 bladder augmentations in an attempt to define the timing and risk of vitamin B12 deficiency in pediatric patients after bladder augmentation.

Materials and Methods: From October 2004 to present we obtained serum B12 values in patients who had undergone bladder augmentation at our institution. We looked at patients who had undergone ileal enterocystoplasty and who were 18 years or younger at the time of augmentation. Any B12 value that was obtained while on any form of B12 supplementation was excluded. These criteria resulted in 79 patients with 105 B12 values. B12 values of 200 pg/mL or less were considered “low”, and values between 201 and 300 pg/mL were considered “low-normal”.

Results: There was a statistically significant correlation between follow-up time and serum B12 ($p = 0.0001$). The probability of low B12 increased as follow-up time increased ($p = 0.007$), as did the probability of low-normal B12 ($p = 0.005$). Starting at 7 years postoperatively 6 of 29 patients (21%) had low B12 values, while 12 of 29 (41%) had low-normal values.

Conclusions: Pediatric patients who have undergone ileal enterocystoplasty are at risk for development of vitamin B12 deficiency. These patients are at the highest risk beginning at 7 years postoperatively, and the risk increases with time. We recommend an annual serum B12 value in children beginning at 5 years following bladder augmentation.

Editorial Comment

This research project involved the measurement of B12 levels starting in October 2004 on all bladder augmentation patients that had terminal ileum utilized for the bladder augmentation. Eighty-six patients with B12 levels were available for evaluation and 10 of those patients were being treated for B12 deficiency and were excluded. Seventy-nine percent were studied with B12 levels. Seven of 79 patients (9%) had low B12 levels and 29% had low normal levels. The patients with the longest follow up had the lower B12 levels in general. Sixty-two percent of patients who had been followed for longer than 7 years (29 patients), had lower or normal B12 values. The authors suggest that B12 levels be obtained in patients who have had an ileocystoplasty beginning at 5 years postoperatively.

It is not surprising that if terminal ileum has been “resected” and used as a bladder augmentation that B12 metabolism may be affected. There were only 7 patients who were truly below the lowest limits of normal B12 values in their institution and the authors include a number of patients that have values in the normal range and consider them low normal. There was no megaloblastic anemia in their study and no neurologic deficits, although their study raises the concern that long-term follow up will be necessary and treatment before the megaloblastic anemia or neurologic symptoms occur, would obviously be in the patient’s best interest.

Dr. Brent W. Snow

Division of Urology

University of Utah Health Sci Ctr

Salt Lake City, Utah, USA

E-mail: brent.snow@hsc.utah.edu