Of all participants, only 13% and 36%, respectively, ever diagnosed a Gleason score (GS) of 2 to 3 or 4 on needle biopsies (NBX), and 88% of those who did so assigned a GS 4 to < 1% of cancers. Cribriform Gleason pattern (GP) 3 was acknowledged by 88% but a majority of them would classify < or =20% of cribriform patterns as GP 3. One third only accepted cribriform or fusion patterns as GP 4, but two thirds also included incomplete or poorly defined glands. For GP 5 to be identified on NBX, 83% required clusters of individual cells, strands, or nests seen at less than x40 lens magnification. Only 26% defined GS on NBX as primary + tertiary GP, and a majority would mention a tertiary pattern separately. For NBX, global or highest GS was reported by 40% and 10%, respectively, whereas 46% only gave a separate GS for each individual NBX core. In conclusion, there is a need to standardize practical application of Gleason grading both in terms of interpretation of patterns as well as how grading is reported. Our survey data provide information to general pathologists about the most common grading practices among genitourinary pathologists.

Editorial Comment
The questionnaire clearly disclosed controversies among pathologists regarding how to report Gleason grading. During the annual meeting of the United States and Canadian Academy of Pathology (USCAP) held in San Antonio, Texas, 2005, a consensus meeting on Gleason grading was organized by JI Epstein. Over 70 urological pathologists were invited to attend and the result of the meeting shall be published in the American Journal of Surgical Pathology. Three recommendations are particularly useful for the urologist:

a) Gleason score 4 rarely is seen on needle biopsies and almost never the lesion is seen in its totality due to the thickness of the core, therefore, a note should be added to the report stating that the Gleason score probably is underestimated;

b) in case a tertiary grade is present on needle biopsies, the consensus of the group was to report the primary pattern and the highest grade as the secondary pattern. Example: grade 3 (60% of the area), grade 4 (30% of the area), grade 5 (10% of the area) - Gleason 3 + 5 = 8;

c) each core should be graded individually; the urologist should consider the highest score.

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INVESTIGATIVE UROLOGY

The Macedo-Malone antegrade continence enema procedure: early experience
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Purpose: The successful treatment of fecal incontinence can dramatically improve the quality of life of affected children. The introduction of the Malone antegrade continence enema provides the opportunity to manage previously resistant cases. However, using the appendix to create this catheterizable channel is not always possible, and the duration of these antegrade enemas is a source of concern for the patients. We describe a new approach to create left continent colonic access to shorten the duration of these enemas, and report the experience gained from the first 9 cases managed at our institution.
Materials and Methods: During a 5-year period 9 patients underwent a Macedo-Malone antegrade continence enema at our institution. Incontinence was associated with myelomeningocele in 7 patients and anorectal malformation in 2. The antegrade continence enema procedure is begun by isolating a 2 cm flap in a tenia on the left colon (spleen flexure). A 12Fr silicone Foley catheter is placed on the mucosal surface of the flap to allow tubularization of the plate with interrupted polyglycolic acid 3-zero transverse sutures, creating an efferent tubular conduit. Antegrade colonic washouts were started 2 weeks after surgery with saline solution or tap water in all patients.

Results: Followup of our 9 cases ranged from 8 to 33 months (average 20.7). Enema volume varied from 250 to 800 ml, with administration taking from 45 to 60 minutes, and colonic evacuation occurred within 30 to 60 minutes of enema administration. Of the 9 patients 8 were completely continent and 1 was partially continent. Four patients experienced difficulty with catheterization initially because of stenosis of the stomal track. The affected stomas were dilated, which was successful in 1 case. Three patients subsequently required stomal revision.

Conclusions: The Macedo-Malone procedure is a relatively straightforward operative approach providing an effective washout technique that is acceptable to parents and children.

Editorial Comment

After extensive investigation in animals, the authors transposed to clinical setting their experience with a new approach to create left continent colonic access to shorten the duration of antegrade enemas for children who have not only urinary incontinence, but also have problems of fecal elimination. Macedo & Srougi (1) described a continent catheterizable ileum based reservoir in which a catheterizable conduit could be created in continuity with the augmented segment. The Macedo-Malone procedure incorporates some of the same principles that have proved reliable in urinary diversion. The authors initially demonstrated that this procedure in the left colon might significantly decrease the time required for enema administration and washout, thereby increasing patient satisfaction and compliance. The authors have to be congratulated on this new technique to antegrade enemas, based on a solid previous basic investigation in animals.

Reference

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Urinary glycosaminoglycan excretion during the menstrual cycle in normal young women
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Purpose: We investigated whether the menstrual cycle affects urinary glycosaminoglycan (GAG) excretion in normal young women.

Materials and Methods: Urine samples from 10 healthy women 19 to 21 years old were collected daily during the whole menstrual cycle. Concentration of total urinary GAG was assessed as µg hexuronic acid per mg creatinine. Proportions of sulfated GAG species were determined by agarose gel electrophoresis.
Results: Mean excretion values +/- SD for period days 4 to 13 and 15 to 28 of the cycle were significantly different (0.445 +/- 0.041 vs 0.356 +/- 0.035 microg/mg, p < 0.001). Correlation between values for the first and second halves of the cycle showed that this difference was consistent irrespective of individual variations in GAG excretion (r = 0.9757, p < 0.001). Proportions of urinary sulfated GAG did not change during the cycle.

Conclusions: Excretion of total urinary GAG during the normal menstrual cycle of young women has a biphasic pattern with significantly higher values occurring in the first half of the cycle. This variation implies modulation by estrogens and consequently it should be considered when comparing the GAG concentration in urine samples from women of childbearing age.

Editorial Comment

In the current study urine samples were obtained on a daily basis from a highly homogeneous group of donors. The authors isolated total GAG from these samples, thereby, eliminating other metabolites. The results showed a significant increase in total urinary GAG excretion in the first half of the cycle, which paralleled the normal increase in serum estrogen levels that occurs at this phase. In general, estrogen inhibits the synthesis of extracellular matrix molecules by many mesenchymal cell types, such as vascular smooth muscle cells. Such inhibition would shift normal proteoglycan turnover toward degradation, which could explain the increase in GAG urinary excretion that was found in the first half of the cycle.

It was not observed significant variation in the relative concentration of sulfated GAG during the different phases of the cycle. On the other hand, the results indicate that heparan sulfate was the prevailing urinary GAG during the whole cycle. Because heparan sulfate is the most abundant GAG in the glomerulus, the present findings support the hypothesis that renal structures are one of the main sources of urinary GAG.

Worth of attention, is the fact that pathogenesis of interstitial cystitis is usually related to alterations in the GAG urothelial layer, which would allow the permeation of irritant urinary components into the vesical wall. Several reports have shown abnormal urinary GAG excretion in patients with interstitial cystitis, although the results are conflicting. Accordingly, urinary GAG levels in female patients may be decreased, unaltered or significantly increased. In these reports controls usually consisted of urine samples from healthy women of childbearing age. However, the dates of the menstrual cycle in which these control samples were collected were not provided. Since the results of the present work indicate that urinary GAG excretion during the normal menstrual cycle has a significant and consistent variation, studies evaluating GAG excretion in women could lead to misleading or erroneous results if comparisons were made among samples taken from different phases of the cycle. This may be indeed the reason underlying the inconsistent results in previously published reports.

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RECONSTRUCTIVE UROLOGY

A randomized controlled trial of duloxetine alone, pelvic floor muscle training alone, combined treatment and no active treatment in women with stress urinary incontinence
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