

renal trauma in the pediatric patient. *J Pediatr Surg* 16: 669–676, 1981.

13. Ahmed S, and Morris LL: Renal parenchymal injuries secondary to blunt abdominal trauma in childhood: a 10-year review. *Br J Urol* 54: 470–477, 1982.

14. McAninch JW: Injuries to the urinary system in trauma management, in Blaidswell WF, and Trunkey DD (Eds): *Abdominal Trauma*, New York, Thieme-Straffon, Inc., 1982, vol. 1, chap 11, pp 199–227.

15. Carlton CE Jr: Early operation in the management of blunt renal trauma, in Scott R Jr (Ed): *Current Controversies in Urological Management*, Philadelphia, WB Saunders, 1972, chap 7, essay 1, pp 109–111.

16. Reid IS: Renal trauma in children: a ten-year review. *Aust NZ J Surg* 42: 260–266, 1973.

EDITORIAL COMMENT

The authors present an analysis of 58 youngsters with hematuria from blunt abdominal trauma. Regarding diagnosis, they suggest that *isolated microhematuria* requires a genitourinary ultrasonogram, whereas gross hematuria or microhematuria in the midst of multisystem trauma demands a CT scan. Curiously, none of these patients had an underlying genitourinary anomaly such as an occult ureteropelvic junction obstruction, although the authors referred to other experiences wherein these anomalies comprise 10 percent of patients with hematuria after minor blunt trauma. This series was also unusual in that none of the patients had lower urinary tract injury. We are still reluctant to forgo a urethrogram and voiding cystogram in a patient with blunt abdominal trauma and hematuria unless the suspicion of a lower uri-

nary tract injury is extremely low. Therapeutically, nonoperative management was the rule; only 1 patient in this series required operation. The authors have followed the old adage (and I wish I knew its source)—that for blunt renal trauma one should be diagnostically aggressive but surgically conservative.

Microhematuria remains problematic. In many instances the placement of a urethral catheter to monitor a trauma victim will create some microhematuria. Furthermore, the definition of microhematuria varies among practitioners. Many trauma units rely on dipsticks to assess hematuria, but these have been falsely positive as well as falsely negative in our experience. Nothing beats looking at a spun urine specimen under the microscope. This is an extended part of the physical examination done by any properly trained urologist. The visual impact of, say *8–10 red blood cells per high power field* is a more valuable morsel of information to help assemble a clinical impression than a laboratory technician's *two plus marks* (++) . It is the evaluation of isolated microhematuria after mild to modest abdominal trauma that raises the *cost effective care* issue. Our problem with this buzz phrase is its explicit prioritization; *cost* is first and *care* is second on the agenda. The authors of this paper present a useful algorithm. It seems to fit the reasonable needs of pediatric patients and, secondarily, their approach seems economical, but thankfully it was not written from that politically correct perspective.

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