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VARIATION IN THE UROLOGICAL MANAGEMENT OF SPINAL CORD INJURY PATIENTS IN THE UK AND EIRE

Aims of Study

Spinal cord injury (SCI) is associated with a high incidence of urinary tract morbidity [1], and despite recent advances in care, the associated mortality is still much greater than that seen in the non-SCI population[2]. Despite the close relationship between SCI and urinary tract dysfunction, few guidelines are available relating to their common management. It was therefore the authors' opinion that a great variation with regard to urological management of SCI patients existed in U.K. and Eire. To test this hypothesis, we questioned the 12 units on key areas of practice.

Methods

During December 2002, each of the 12 spinal injuries units (SIU) were sent a questionnaire relating to four main areas: urological outpatient follow-up practice, urinary tract infection (UTI) management, upper tract surveillance and urodynamic testing. The questionnaire was sent to the urologist or physician who primarily dealt with the urological aspects of patient care.

<u>Results</u>

All 12 of the units (100%) eventually replied, however 3 units had to be contacted a second time. The frequency of urological follow-up is listed in Table 1:

 Table 1
 Frequency of routine urological outpatient follow-up in individual spinal injury units.

Frequency of follow-up	Number of units
Only as required	2
Every 6 months	1
Annually	6
1 – 2 yearly	1
1 – 5 yearly	1
Annually; biannually if sta	ble or
>10 years since i	

Regarding the management of UTI, only 5 (42%) had unified department protocols. Only 1 unit would routinely treat asymptomatic UTI (in patients with permanent catheters). Of the 12 units, 4 (33%) advocated antibiotic prophylaxis for recurrent UTI. The mean duration of treatment for symptomatic UTI was 6.3 days (range 3-14).

All units practiced routine upper tract monitoring with imaging studies, however there was a wide range in frequency of studies (Table 2).

Frequency of study	Number of units	
Annually	9	
Every 18 months	1	
Biannually	1	
Every 3 years	1	

Concerning urodynamic studies, 6 units (50%) did not perform them on a routine basis (Table 3). 3 (25%)of the units performed annual tests, however 1 of these switched to testing every 2 years if patients were 'stable', or greater than 10 years had passed since injury. 2 units investigated their 'reflex voiders' more frequently. The remaining unit performed routine urodynamics only once on patients (during rehabilitation).

Frequency of study	Number of units
Only as required or indicated	6
Only once in rehabilitation	1
Annually	1
Annually; biannually if stable or	
>10 years since injury	1
After 3 months, then annually	1
Only in 'reflex voiders' (2-3 yearly) Annually in 'reflex voiders',	1
3 yearly in others	1

Table 3 Frequency of routine urodynamic studies in spinal injury units.

Conclusions

The overriding aim of the urological care of SCI patients is to prevent renal deterioration, and with appropriate surveillance and management, the morbidity and mortality from urinary tract dysfunction can be successfully prevented [3]. However, we have highlighted a current wide variation in practice in the U.K. and Eire.

In relation to urological outpatient follow-up frequency, 6 (50%) of units did not perform routine review. However, some units performed annual review. Whether or not this is advantageous to patient is unknown, but these figures highlight an imbalance of care throughout the country. It is known that comprehensive outpatient care is associated with better outcomes in SCI [4].

Given the importance of the subject in SCI, it is perhaps surprising that 7 units (58%) do not have department protocols relating to UTI management. Antibiotic use in asymptomatic UTI remains contentious; where antibiotics are indicated there appears to be a wide range in treatment durations between units. Additionally, a third of units use antibiotic prophylaxis against recurrent UTI. This is again a debatable issue, as prophylaxis may in fact be harmful to patients [5].

Routine imaging is vital in the diagnosis of impending or silent pathology [6], and all units perform this (albeit at differing time intervals). Routine urodynamic studies also help to detect and manage problems, however only 50% of units perform them.

In conclusion, the wide variation in urological practice in SCI highlights the need for increased research and collaboration between units to determine the best follow-up strategies.

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