

Care should include: washing the skin area around the catheter with soap and water every day (showers can be taken with the catheter in situ), but taking care to ensure the area is thoroughly dried afterwards.

Powder or creams should not be used. If the skin around the catheter becomes red, swollen or weeping, seek medical attention.

With **condom catheters**, the risk of infection is lower, but there is more likely to be irritation of the penis and care must be taken to avoid rashes, inflammation and impaired blood flow to the penis.

If there is decreased sensation, pain or discomfort that might otherwise alert you to a problem will be absent, so extra vigilance must be maintained.

Details on safe and proper use of condom catheters is available from continence advisors (there should be one local to you, sorry UK only)

Serious Risks of Indwelling catheters:

The incidence of bladder cancer seems to be higher in spinal cord injury patients than in the general population.

This increased risk may be further increased by the use of an indwelling catheter.

To gain some perspective on this: in the general population, 1 in 5000 people develops bladder cancer; in SCI patients about 3% on average (some studies quote a lower incidence than normal, most a higher).

At Stoke Mandeville, in 1991, a study ([\[1\]](#)) found 25 cases of bladder cancer out of 6744 SCI patients(4%), and a study ([\[2\]](#)) in America found 8 cases out of 2900 (less than 1%).

To retain some perspective, one must bear in mind that SCI patient deaths are more likely to result from complications other than bladder cancer.

It does seem that indwelling catheters, Foleys or suprapubic do account for this increased risk, but in fact, the situation is a great deal more complex than that.

There are likely to be a number of factors involved.

The key factor appears to be *irritation* of the bladder lining, over a sustained period.

Some experts believe that SCI results in various changes within the urinary system and that this renders the bladder more susceptible to irritation.

Not least, repeated urinary tract infections (UTIs) are a common source of irritation, and the degree of irritation is in proportion to the frequency and severity of the UTIs.

However, the catheter still carries a significant risk in terms of development of bladder cancer.

The incidence of cancer is greater with indwelling catheters compared with external collectors and intermittent catheterisation or other types of bladder management.

A large study of 2660 SCI patients demonstrated a 3.8 times increased risk of bladder cancer in those with indwelling catheters compared with those not using them.

This risk increases considerably with the length of time over which this technique is used, rising from 0.2% during the first 10 years to 9% at over 30 years.

The most common presenting symptom of bladder cancer is persistent blood in the urine when infection has been excluded.

Usually, the best way to check is to have a *cystoscopy* which uses a telescope introduced through the urethra to visualise the lining of the bladder, and to take biopsies if necessary.

If the biopsy results shows *squamous metaplasia*, this microscopic cellular change is quite a common occurrence in any patients, post-SCI or not, and although some experts believe that this predisposes to development of cancer, there is still some controversy surrounding this viewpoint.

How to decrease risk: strict adherence to hygiene techniques and preferably an intermittent catheterisation regime; regular monitoring (those with indwelling catheters may need annual/biannual cystoscopy); stopping smoking (another risk factor); use of appropriate drugs to treat bladder problems; switching the leg to which the catheter bag is attached, on a daily basis, may help to prevent one specific area becoming irritated; use of newer hydrophilic catheters (and beware latex allergy): these are lubricated and made of softer materials; change catheters as often as recommended: don't try to save money!

Repeated infections and grit in your urine might suggest bladder stones, which are another risk factor for cancer. Once irritation has occurred it may not be reversed by changing bladder management: prevention is better than cure!

Measures to reduce infections/stones: good fluid intake: 3-4 quarts of water a day; take prophylactic medication to prevent infection if this is prescribed; more than 2 or 3 infections a year may not only increase risk of cancer, but is also generally debilitating.

General measures such as quitting smoking, use of nutritional supplements (antioxidant vitamins C, E and B6) may also be helpful.

SUPPORT CONTACTS: (UK only)

Continence Foundation
307 Hatton Square
16 Baldwins Gardens
London EC1 7RJ
Confidential national helpline:
0207 831 9831 (9.30-4.30 Mon-Fri.)
Support/information
Details of local continence advisors
Disabled Living Foundation Helpline

Tel: 0870 603 9177 (10-4 Mon-Fri)
Advice on clothing/equipment

Incontact
St. Pancras Hospital
London NW1 0PE
Tel: 0207 530 3401
Consumer support group
Newsletter has tips on continence products.

PromoCon
C/o Disabled Living Centre
Redbank House
4 St. Chad's Street
Manchester M8 8QA
Tel: 0161 832 3678
National info. service on continence products

RADAR
12 City Forum
City Road
London EC1V 8
Freepost SCE 5568

Bracknell, Berks. RG42 2ZZ
Tel: 01344 643425 (Sundays only 12-4)
Helpline

- [1] El Masri WS, Fellows G *Paraplegia* 1981;19:265-70. Bladder cancer after spinal cord injury.
[2] Bickel A, Culkin DJ, Wheeler JS. *The Journal of Urology* 1991;146:1240-2. Bladder cancer in spinal cord injury patients