



# ACI Urology Network - Nursing

## Neobladder

### Clinical Guideline and Patient Information

**Date:** March 2013

**Version:** Updated March 2013

**Release Status:** Draft

**Release Date:**

**Author:** Urology Nursing Working Group

**Owner:** Agency for Clinical Innovation

# Acknowledgements

Colleen McDonald CNC Urology, Westmead Hospital WSLHD

Compiled by Urology Nursing Education Working Party Members (September 2008)

The following pages provide a clinical guideline template to enable clinicians to develop their own resource material relevant to their hospital and Area Health Service. They have been compiled by clinicians for clinicians. If you wish to use this material please acknowledge those that have kindly provided their work to enable use by others. Revise all material with colleagues before using to ensure it is current and reflects best practice.

**Disclaimer:** The information contained herein is provided in good faith as a public service. The accuracy of any statements made is not guaranteed and it is the responsibility of readers to make their own enquiries as to the accuracy, currency and appropriateness of any information or advice provided. Liability for any act or omission occurring in reliance on this document or for any loss, damage or injury occurring as a consequence of such act or omission is expressly disclaimed.

AGENCY FOR CLINICAL INNOVATION  
Level 4, Sage Building  
67 Albert Avenue  
Chatswood NSW 2067

Agency for Clinical Innovation  
PO Box 699 Chatswood NSW 2057  
T +61 2 9464 4666 | F +61 2 9464 4728  
E [info@aci.nsw.gov.au](mailto:info@aci.nsw.gov.au) | [www.aci.health.nsw.gov.au](http://www.aci.health.nsw.gov.au)

Produced by:  
ACI Urology Network Nurses Working group

Ph. +61 2 9464 4666  
Email. [info@aci.health.nsw.gov.au](mailto:info@aci.health.nsw.gov.au)

Further copies of this publication can be obtained from:  
Agency for Clinical Innovation website at: [www.aci.health.nsw.gov.au](http://www.aci.health.nsw.gov.au)

Disclaimer: Content within this publication was accurate at the time of publication. This work is copyright. It may be reproduced in whole or part for study or training purposes subject to the inclusion of an acknowledgment of the source.

It may not be reproduced for commercial usage or sale. Reproduction for purposes other than those indicated above requires written permission from the Agency for Clinical Innovation.

© Agency for Clinical Innovation 2010

# TABLE OF CONTENTS

<b>GUIDELINES ON NEOBLADDER</b>	<b>2</b>
What is a Neobladder	2
Neobladder	2
<b>PREOPERATIVE CARE</b>	<b>3</b>
<b>POST OPERATIVE MANAGEMENT</b>	<b>4</b>
<b>PATIENT SELF MANAGEMENT OF NEOBLADDER</b>	<b>5</b>
<b>MANUAL BLADDER WASHOUT</b>	<b>5</b>
Equipment	5
Method	5
References	6
Late Complications may develop (greater than 3 months):	6
Sexual Dysfunction	6
Adjuvant Chemotherapy	6
Reference	7
<b>PATIENT FACT SHEET</b>	<b>8</b>
What is a Neobladder?	8
What are the changes to your bladder function following the operation?	8
<b>CHANGES TO YOUR BLADDER CONTROL</b>	<b>8</b>
Further changes you will have	9
Possible problems of non-cleared mucous from your neobladder	9
<b>HOW CAN I MANAGE?</b>	<b>9</b>
Bladder Care Regime	9
Methods of bladder emptying	9
Intermittent self catheterisation and bladder irrigation	10
Continence Aids	10
Follow up Care	10
Important Points	11
<b>SUPPLY OF EQUIPMENT AND FUNDING BODIES</b>	<b>12</b>
Continence Aids Payment Scheme (CAPS)	12
Enable NSW Aids and Equipment Program	12
BrightSky Australia offers	13
Independence Australia	13
Intouch Direct	13
Chemist	13
Supermarkets	13
Department of Veterans' Affairs (DVA)	14

## Guidelines on Neobladder

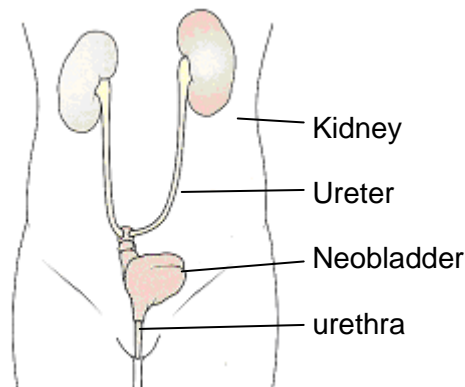
### What is a Neobladder

Neo = new    Neobladder = new bladder

A Neobladder is a urinary pouch made from 50 -60 cm of the intestine. Whilst the lower part of the small intestine (ileum) is generally used, it is possible the surgeon may utilize the large intestine (colon).

During surgery, the bladder and prostate gland will be removed and the chosen segment of intestine is detubulated and turned into a sphere shaped Neobladder.

The left and right ureters are implanted into the Neobladder allowing urine to drain into the Neobladder directly from the kidneys. The urethra is then anatomised onto the base of the Neobladder. This surgical procedure prevents the need for an external urinary drainage device, with all the plumbing being internalized.



Neobladder

## Preoperative Care

- General Preadmission assessment
- Medical assessment
- Anaesthetic assessment – request a central line placement in Operating Theatre in case post operative Total Parenteral Nutrition is required
- Stomal Therapy – assessment/sitting, this is only with potential for Ileal Conduit following a failed Neobladder
- Clinical Nurse Specialist/Consultant –assessment and education
- Clean Intermittent Self Catheterisation – CISC education
- Continence management education – information on Neobladder management, selection of continence aids – catheters, uridome, pads
- Pelvic floor muscle exercises
- Identify patient's specific concerns and needs
- The patient needs to be fit and well
- Good nutritional status – may need to consult Dietitian
- On a high protein diet
- Have a good support network – may need to consult Social Worker
- Sexual function assessment – by Medical officer
- Discuss possible fertility issue – availability of sperm banking if required.
- Bowel preparation – as per hospital protocol
- Patient admission is on day of surgery.

## Post Operative Management

- General post operative care
- Nasogastric (NG) tube – on 4 hourly manual aspirations and on free drainage
- Intravenous Therapy
- Two suction drains –am/pm. measures
- One large bore supra pubic catheter (SPC) – on free drainage
- Urethral catheter – free drainage
- Two exteriorized ureteric stents – free drainage
- The Neobladder is irrigated as per hospital policy to remove mucous. This may be intermittent or continuous. This is attended via the SPC.
- Ureteric stents may be irrigated with 10 mls Normal Saline (NaCl) if there is a notable decrease in urine output.

NG tube may be removed when bowel sounds return and aspirate volume decreases.

**NB:** Progress to diet as tolerated and as ordered by MO following daily assessment. If diet is not tolerated for prolonged period then Total Parenteral Nutrition (TPN) must be considered.

- Vacuum drains are removed as per medical officer instruction, usually when drainage is <50mls in 24 hours.

**NB:** If there is a significant increase in drainage output, a drain specimen is sent for creatinine levels to determine if there is a urine leak.

- SPC irrigation is titrated down during the first 2 weeks post operatively. Commenced at 4 hourly irrigation > reduce to 4 times per day > reduce to 3 times per day >reduce to 2 times per day – Or as per hospital policy for SPC irrigation in Neobladder.

**NB:** A Cystogram is required prior to removal of urethral catheter. A Stenogram may or may not be required before removal of ureteric stents (medical decision)  
Once urethral catheter and ureteric stents are removed patient education commences on self catheterization and manual bladder irrigation.

- Spigot SPC until Clean Intermittent Self Catheterization (CISC) technique is established. This may vary with surgeon preference.

## Patient Self Management of Neobladder

Education is required of self-care, including practical education on skin care, and selection of continence aids. Education is also given on regular timed toileting, self catheterisation technique and Neobladder irrigation for the purpose of mucous evacuation.

Education re-voiding techniques e.g. tightening of the abdominal muscles (these patients do not experience a bladder filling sensation)

**NB** Patients should observe their urine for type and amount of mucous and titrate the frequency of irrigation as necessary.

## Manual Bladder Washout

A manual bladder washout is required to evacuate mucous

### Equipment

- Nelaton Catheter 14Fg
- 50ml catheter tip syringe
- Lubricant (KY Gel)
- Kidney dish – (sterile)
- 500ml bottle NaCl (Normal Saline) – at room temperature
- Plastic container with a lid, one big enough to store the kidney dish and the 50ml syringe
- Milton tablets/solution

### Method

- Wash hands
- Set up equipment
- Wash hands
- Clean urethral meatus
- Proceed to perform self catheterization
- Drain bladder
- Instil 50mls NaCl – via catheter
- Withdraw NaCl- from catheter by drawing back on plunger – dispose of used NaCl
- Repeat procedure until clear of mucous – instilling 50mls at a time, withdrawing 50mls and disposing into a receptacle or toilet.

This procedure needs to be titrated according to local hospital policy, physical appearance and quantity of mucous.

At home - on completion of the procedure, the kidney dish and the syringe (barrel removed and rinsed) can be soaked in Milton solution. This equipment can be reused.

Hospital patient – use new sterile equipment and discard after the procedure.

## References

- Patient Information Sheet – “Neobladder” - Concord Hospital -Urology Support Services
- Patient Information Sheet –“Neobladder” – John Hunter Hospital Urological Services
- Patient Information booklet – “Urinary Diversions” –Prince of Wales Hospital
- Bladder Cancer Web Café- Information on Neobladder – <http://blcwebcafe.org/neobladders.asp>

## Late Complications may develop (greater than 3 months):

- Ureteral stricture
- Urolithiasis
- Urethral stricture
- Malabsorption
- Refractory incontinence
- Metabolic acidosis
- Hernia
- Urethral tumour recurrence

Patient needs to have regular visit with the primary care doctor, specialist urology nurse and urologist. Frequency of visit is determined by the appropriate health care practitioner. The goal is to provide ongoing monitoring, education and early detect of complication.

## Sexual Dysfunction

**Changes to sexual function may impact on patients’ psychological well being and will be reviewed during recovery. Therapeutic options should target patient specific needs:**

- Physical health status
- Emotional needs
- Relationship
- Cultural
- Cost

## Adjuvant Chemotherapy

Patient with unfavourable pathology report such as positive surgical margin will be discussed at the multidisciplinary meeting. Medical Oncologist will assess the need for chemotherapy and commence on the appropriate treatment and care path.



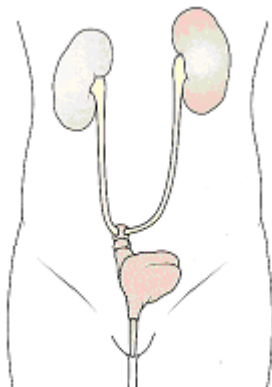
## Reference

International Collaboration of Trialists, Medical Research Council Advanced Bladder Cancer Working Party (now the National Cancer Research Institute Bladder Cancer Clinical Studies Group), European Organisation for Research and Treatment of Cancer Genito-Urinary Tract Cancer Group, Australian Bladder Cancer Study Group, National Cancer Institute of Canada Clinical Trials Group, Finn bladder, Norwegian Bladder Cancer Study Group, Club Urologico Espanol de Tratamiento Oncologico Group, Griffiths G, Hall R, Sylvester R, Raghavan D, Parmar MK (2011), International phase III trial assessing neoadjuvant cisplatin, methotrexate, and vinblastine chemotherapy for muscle-invasive bladder cancer: long-term results of the BA06 30894 trial, *Journal of clinical oncology*, 29 :16, p2171-2177

## Patient Fact Sheet

### What is a Neobladder?

A Neobladder is a pouch to store urine, it replaces the bladder that you have had removed. The neobladder is made from a piece of your intestine, around 50-60cm long.



#### Neobladder

Your kidneys will drain urine directly into the neobladder via your right and left ureters which have been implanted into the neobladder.

The urethra (outlet/water pipe) has been connected to the base of the neobladder to allow normal passage of urine.

At the end of the surgery your neobladder will store urine in a normal manner; you will need to learn different methods of emptying your neobladder.

In the early recovery period you will have two tubes (catheters) to drain urine and wash out mucous (bladder irrigation). One catheter is positioned in the urethra and the other in the abdomen, just above the pubic bone (suprapubic catheter). Both catheters go directly into the neobladder. A couple of weeks later these catheters will be removed.

Initially the neobladder has a small volume capacity, about 120-200mls of urine. Over the next 6 months its capacity will gradually increase to the normal range of 400-500mls.

### What are the changes to your bladder function following the operation?

The neobladder will not have strong muscular contraction, and will not have the usual bladder sensation. This means that there will not be the same degree of urgency and pressure when the bladder reaches its capacity.

Following your surgery you will be given support, education and information from specialist nursing staff. This will assist you to adjust and learn to manage your neobladder.

## Changes to your bladder control

**Bladder control** is going to be reduced initially. Following your operation your new bladder capacity is small and the new bladder outlet might not be watertight.

This may mean that as your neobladder is filling up, you may experience some dribbling (stress) incontinence.

At night, when the bladder is full, urine may leak out of the urethra resulting in (overflow) incontinence.

You can overcome these initial problems by regular toileting and the use of continence aids.

## **Further changes you will have**

Following surgery, you will notice the appearance of lumpy **mucus** in the urine. This is normal because your neobladder (which has been made of bowel) has an inner lining which produces mucous. This means that there will always be mucus in your urine.

It is good to clear the mucus regularly because retention of mucus in the bladder may cause problems.

## **Possible problems of non-cleared mucous from your neobladder**

Mucous not cleared regularly from the bladder can cause a reduction in the flow of urine, due to mucus obstruction.

Non-cleared mucous may result in an inability to pass urine and cause the neobladder to over-distend.

Non-cleared mucus may also provide a medium for bacteria to grow causing urinary tract infection.

In the first two weeks after surgery, the nurse will carry out bladder irrigation every four hours removing mucus from the neobladder. This procedure helps to maintain good urine flow into the urinary drainage tube (catheter) and collection bags. This procedure should not cause any discomfort or pain.

The production of mucus will continue, though reduce in volume over the next twelve months. Meanwhile the capacity of the bladder to hold larger volumes of urine will continue to increase, up to around 500mls.

## **How can I manage?**

### **Bladder Care Regime**

Around two weeks after surgery the catheters will be removed. From this time on you will need to empty your new bladder in one of two different ways, with “External abdominal pressure” or through “Intermittent self catheterisation” or with a combination of both.

Your new bladder should be emptied regularly, initially every 2 hours during the day and every 3 hours at night. The interval between each emptying will be gradually increased over the first four weeks.

By week four to week six your bladder should be emptied every 3 -4 hours during the day to a maximum interval of 6 hours at night.

### **Methods of bladder emptying**

#### **‘External abdominal pressure’**

When it is time to empty your bladder, sit down on the toilet

1. Relax your pelvic floor muscles.
2. Tug in (tighten) your abdominal muscles for 10 – 15 seconds. Repeat three to four times.
3. Apply direct pressure on the lower tummy (abdomen) just above your pubic bone for about 10 seconds using forearm or both hands.
4. Repeat this step three to four times until you cannot expel any more urine from the bladder.
5. Next bend your tummy by leaning forward. Maintain your position for 30 seconds and repeat once or twice.

**NB:** Some men can empty their bladder well in a standing position. Try different positions to see which suits you best.

## **Intermittent self catheterisation and bladder irrigation**

This is a procedure involving the insertion of a very small soft straight catheter into the urethra (water pipe) to empty the neobladder of mucus and residual urine.

A specialist nurse will instruct you in this technique. You may have the opportunity to watch an instructional film/DVD.

- You should maintain a record of catheterised urine volume for review.
- Maintain regular fluid intake. About 2 litres of fluid, including a few glasses of water, is recommended every day.
- Please avoid alcohol at the initial stage until you have your first check up with the urologist.

## **Continence Aids**

If you require a long term supply of continence aids, including catheters for intermittent catheterisation then you may be eligible for a Continence Aids Payment Scheme (CAPS – processed by Medicare). Please talk to your specialist nurse about the application form when you come back for follow up visit.

## **Follow up Care**

You will need regular follow-up visits with your local doctor and urologist.

This will involve regular blood tests to monitor your electrolytes, vitamin B level and your kidney function.

## **Important Points**

**Once you have a bladder care regime established remember to always empty your bladder at least 4 -5 hourly during the day.**

**Discuss any concern with your nurse, local doctor or urologist.**

**Have regular follow-up visit with your local doctor and urologist.**

**Carry a medical card about your Neobladder in your wallet.**

**If you require major surgery in the future, you may require continuous bladder drainage until you can manage your bladder independently. Please discuss bladder care with the treating physician.**

## Supply of Equipment and Funding Bodies

An assessment by a continence nurse advisor is recommended to ensure the most appropriate continence product, including the correct fit and application of the product.

### Continence Aids Payment Scheme (CAPS)

This is a federal government scheme available to people aged five years and over who have a permanent and severe incontinence due to:

- Neurological conditions (no Pension Concession Card required) such as intellectual disability (e.g. autism, autism spectrum and Aspergers Syndrome), paraplegia & quadriplegia, acquired neurological conditions (e.g. Alzheimer's Disease, dementia), degenerative neurological diseases (e.g. Parkinson Disease, motor neurone disease), or
- Permanent and severe bladder/bowel innervations (e.g. atonic bladder/hypotonic bladder, prostatectomy with nerve removal) or
- Other causes such as bowel cancer, prostate disease and holds a pension Concession Card

Applicants will need to provide a Health Report from an appropriate health professional such as their medical practitioner or continence nurse about their condition.

Eligible CAPS clients receive an annual indexed payment for continence products

A patient is NOT eligible for CAPS if their incontinence is not permanent or severe or any of the following:

- they are a high care resident in a Australian Government funded aged care home
- they are eligible for assistance with continence aids under the Rehabilitation Appliances Program ( RAP ) which is available through the Department of Veterans' Affairs
- they receive an Australian government funded Extended Aged Care at Home Package (EACH) or an extended Aged Care at Home Dementia Package ( EACH D package )

Further information on eligibility and to obtain an application form:

CAPS Helpline: 1300 366 455

Email: [continence@health.gov.au](mailto:continence@health.gov.au)

### Enable NSW Aids and Equipment Program

Enable NSW provides a wide range of equipment (including continence aids) to people with permanent disabilities living in the community who:

- Have a permanent or indefinite disability
- Have a Health Care Card, Health Interim Voucher or Pension Concession Card
- Have not received compensation for their injuries or disability, including not being on a Commonwealth rehabilitation Program or being supplied with aids and appliances under the Motor Accident Act
- Are State wards or children in foster care who have a disability.

Continence aids are available to people 3 years and older living in the community or who have recently been discharged from hospital or acute care. The person must be discharged for at least one month and not be under outpatient treatment.

Subsidy is decided by product quota rather than by financial amount. Clients are required to make a \$100 co-payment each year in which an item is received. In the case of continence

products, where the supply is generally ongoing, the client would contribute \$100 each year. PADP is meant as an assistance program not to cover all costs incurred by a person.

Assessment is required by an authorised health professional (assessment by medical practitioners is not accepted) to obtain a prescription for appropriate aids and apply to EnableNSW. Information is available on the NSW Health website:

[www.enable.health.nsw.gov.au](http://www.enable.health.nsw.gov.au)

## **BrightSky Australia offers**

- One-stop-shop that provides retail and a national home delivery service of specialist healthcare products.
- Professional continence and wound care advice by phone or appointment. Please call (02) 8741 5600

Address: 6 Holker Street, Newington NSW 2127 (cnr Avenue of Africa)

Phone no.: 1300 88 66 01

Fax: 1300 88 66 02

Email: [orders@brightsky.com.au](mailto:orders@brightsky.com.au)

Web store: [www.brightsky.com.au](http://www.brightsky.com.au)

## **Independence Australia**

Independence Australia offers online and retail shopping for medical and healthcare products to the general public. It is also one of the national suppliers of continence products to eligible veterans in Australia under the Rehabilitation Appliances Program (RAP). The order form has to be completed by a health professional.

Address: 47B Princes Road West, Auburn NSW 2144

Phone: 1300 78 88 55

Fax: 1300 78 88 11

Email: [customerservice@independencesolutions.com.au](mailto:customerservice@independencesolutions.com.au)

Web store: [www.Independenceaustralia.com](http://www.Independenceaustralia.com)

## **Intouch Direct**

Intouch is one of the national suppliers of continence products to general public, eligible veterans and war widows/widowers.

Phone: 1300 13 42 60

Fax: 1300 76 62 41

Email: [healthcare@intouchdirect.com.au](mailto:healthcare@intouchdirect.com.au)

Web store: [www.intouchdirect.com.au](http://www.intouchdirect.com.au)

## **Chemist**

You may like to discuss with your chemist about getting your supply and negotiate the price.

## **Supermarkets**

Incontinence pads are available from local supermarkets.

## **Department of Veterans' Affairs (DVA)**

The Commonwealth Department of Veterans' Affairs (DVA) provides a range of incontinence products to eligible veterans and ward widow/er's via the Rehabilitation Appliances Program (RAP). Eligible applicants need to:

- hold a Gold Card; ( eligible for treatment of all conditions whether or not they are related to war service) ;
- hold a White Card and the incontinence is a result of a specific accepted disability;
- have been assessed by a health professional as requiring products for incontinence; or
- products are provided as part of the overall health care management

Gold and White Card holders are not eligible if they are residents receiving high level aged care

A form requesting the incontinence products is filled out by the assessing doctor or health professional. It is then sent to an authorised product supplier on behalf of the client.

For all enquiries in regards to continence products and supply arrangements, please Contact the South Australian State Office:

National Continence Contract Team

Department of Veterans' Affairs

GPO Box 1652

(199 Grenfell St)

Adelaide SA 5001

Phone: 1300 131 945

Or NSW Dept of Health – Primary Health & Community Partnerships: (02) 9391 9515

Continence Promotion Centre: (02) 8741 5699