

UROSHIELD™

A Novel Approach
to Urinary
Catheter
Care

- Reduces pain and discomfort associated with catheter use
- Prevents biofilm formation and decreases bacteriuria
- Decreases catheter related trauma
- Increases antibiotic efficacy

UroShield is designed to prevent the formation of biofilm in indwelling urinary catheters. UroShield does not interfere with catheter placement and is simply clipped onto the outer segment of the catheter for optimal effect. In addition, UroShield is indicated to decrease pain, discomfort and bladder spasm associated with indwelling catheter use.

Designed to prevent the formation of biofilm on catheters

Indwelling urinary catheters serve as a nidus for bacterial attachment, biofilm formation and subsequent urinary tract infection (UTI). These infections may cause serious complications and may lead to increased mortality, extended hospital stay and increased medical costs. In fact, catheter acquired infection is one of the most common iatrogenic complications. UroShield is a novel approach to the prevention of biofilm in indwelling urinary catheters.

Transforming catheters into active therapeutic devices

UroShield generates low amplitude, low frequency ultrasound waves on the surfaces of the catheter. The surface acoustic waves interfere with biofilm formation by inhibiting bacterial attachment and confer a protective effect on the mucosa, thus protecting it from catheter trauma. The low frequency acoustic waves decrease pain, discomfort and spasm associated with Foley catheter use. Independent studies at leading universities have proven that surface acoustic waves produced by UroShield enhance the ability of the immune system to fight biofilm. This critical combination of mucosal protection and enhancement of the immune response against biofilm are essential components in prevention of catheter related infection.

Applied directly on the catheter

UroShield is composed of two components: A disposable component - the actuator, which is clipped onto the external portion of any Foley catheter, and a portable, battery powered driver unit which activates the actuator. Once the urinary catheter has been placed into the patient's bladder, the actuator is clipped on the extracorporeal part of the catheter and the device is activated.

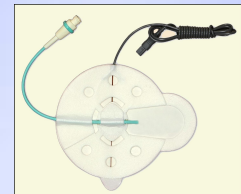


UroShield family of products

Two additional applications of the UroShield platform include acoustically active stabilization patches for percutaneous nephrostomy and supra-pubic cystostomy catheters. In these two products the actuator is embodied in an adhesive stabilization patch, especially designed to fit the anatomy of each site.

Z-Shield: therapeutic patch for Percutaneous Nephrostomy

The Z-Shield patch is an acoustically active stabilization patch designed for percutaneous nephrostomy catheters and applies low frequency ultrasound to the catheter to treat pain, prevent biofilm and maintain prolonged catheter patency.



S-Shield: therapeutic patch for Supra-Pubic Cystostomy

The S-Shield patch is an acoustically active stabilization patch designed for percutaneous cystostomies and applies low frequency ultrasound to the abdominal wall opening as well as to the inserted catheter. The device treats negative ostomy reactions around the skin opening, decreases catheter related pain and spasm and prevents biofilm.

